

Accident

Aircraft Type and Registration:	DG Aviation LS8-e, G-CMMG	
No & Type of Engines:	1 LZ Design D.O.O FES-LS8-M100 electric engine	
Year of Manufacture:	2022 (Serial no: 8545)	
Date & Time (UTC):	25 May 2025 at 1631 hrs	
Location:	Near Milston, Wiltshire	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - None
Injuries:	Crew - 1 (Serious)	Passengers - N/A
Nature of Damage:	Destroyed	
Commander's Licence:	Sailplane Licence	
Commander's Age:	71 years	
Commander's Flying Experience:	1,603 hours (of which 199 were on type) Last 90 days - 47 hours Last 28 days - 26 hours	
Information Source:	AAIB Field Investigation	

Synopsis

During a flight in a UK National Gliding Competition, the pilot of G-CMMG was unable to maintain sufficient height to make it back to Lasham Airfield. The flight path at the end of the five-hour flight did not fit with the experience and normal practices of the pilot and resulted in the glider striking the ground with a high angle of bank. The pilot was seriously injured.

Due to communication issues and a lack of coordination, the emergency services were not informed of the accident for a significant period, during which time the pilot's condition deteriorated. He was subsequently airlifted to hospital where he was treated for multiple injuries, including a traumatic brain injury.

As a result of the investigation the AAIB has made three Safety Recommendations to address the coordination and operational learning between those organisations involved in providing emergency assistance to an aircraft accident. The British Gliding Association (BGA), the Distress & Diversion (D&D) Cell and the Maritime and Coastguard Agency (MCA) have taken safety action to address issues raised by the investigation.

History of the flight

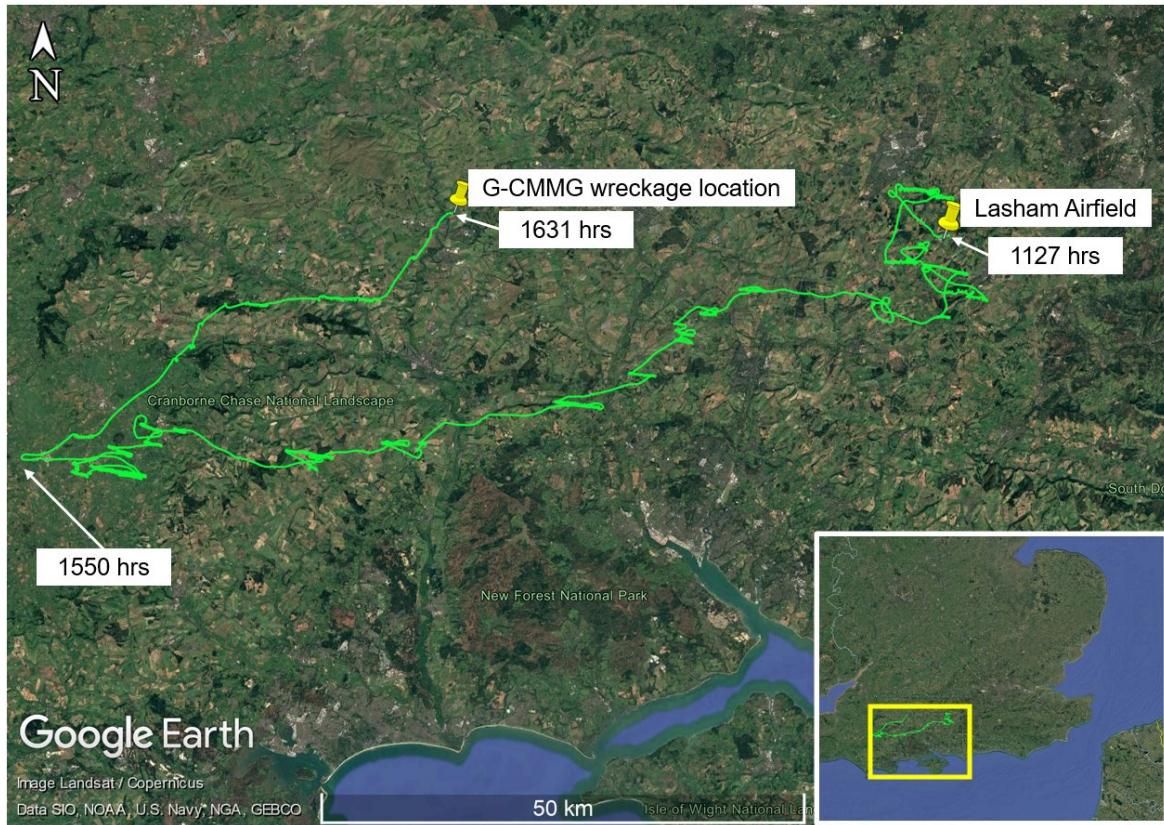
The pilot and his glider were at Lasham Gliding Club to take part in a UK National Gliding Competition which was being held over nine days. The date of the accident was on day two of the competition although the weather had precluded any flying on day one. The

day began at 0900 hrs with a competitor briefing where the day's flying task was revealed. Afterwards the competitors had time to plan their routes, programme their navigation devices and prepare themselves and their gliders before launch. The route required the competitors to head to a circular area centred on Wellington in Somerset, before routing to a second area in Oxfordshire, with the finishing line back at Lasham. The pilot of G-CMMG was not ready to launch at his allocated time so he was moved to the back of his competition class. He was airborne on an aerotow at 1127 hrs. Once G-CMMG was released from the tow at approximately 2,800 ft amsl, he thermalled to the north-west whilst he waited for the competition start gate to open approximately 30 minutes later.

His initial routing took him south-west, routing to the north of Winchester and to the south of Salisbury (Figure 1). His height along the route was between 5,600 ft amsl and 1,000 ft amsl. He reached Henstridge (within the first task area) at around 1550 hrs at a height of 2,800 ft amsl where he turned to the north-east. At around 1607 hrs, having descended to about 1,100 ft amsl, the pilot turned onto a more easterly heading following the Great Ridge towards Salisbury. He gained height by thermalling along the ridge, increasing to about 1,500 ft amsl. At about 1627 hrs, having descended to about 800 ft amsl, he gained about 100 ft in two 360° turns in a thermal before he passed over the A303. As he approached the end of the ridge at 1628 hrs, around 4 nm north-west of Salisbury, he turned to the north-east and passed between Stonehenge and Amesbury at 900 ft. Shortly afterwards as he headed north-east, he entered the Salisbury Plain Danger Areas.

He proceeded to the east of Larkhill, passing over the north side of the village of Durrington where the last data point of the flight was recorded by the navigation display unit. At 1631:28 hrs, with an altitude reading close to the terrain elevation (about 360 ft amsl) he had been flying for nearly five hours. The glider was seen by a witness walking along the road near the accident site, to be very low and with a high angle of bank.

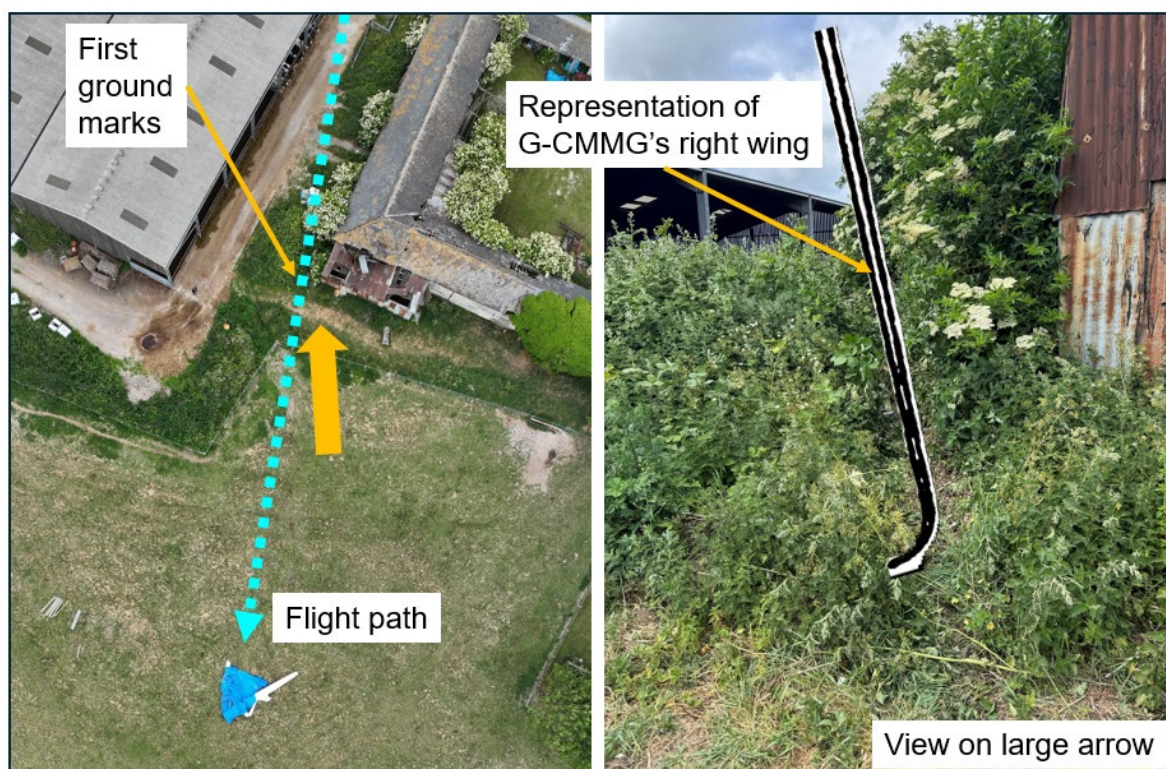
The accident itself was not witnessed by anyone, but the pilot was discovered by a farmer between 30 and 45 minutes after the time of the last recorded data point. The farmer described the pilot as looking dazed and that he was walking around the field, collecting up broken parts of the glider and with a lot of blood around his head. Due to various communication issues, the emergency services were not called until 1748 hrs and by this time, the pilot's condition had deteriorated. An air ambulance attended, and he was airlifted to hospital where he was admitted to the intensive care unit with a serious head injury.

**Figure 1**

Track of the accident flight, recorded by the onboard avionics
© 2025 Google, Image © Landsat / Copernicus

Accident site

The accident site was in a field adjacent to some farm buildings. The first ground marks were from the right wingtip striking the ground close to one building and pieces of the wingtip were caught in the vegetation. The shape and proximity of the marks to the building indicated that the glider was approaching from the north and banking steeply with the wings almost vertical (Figure 2). The next ground marks into the field indicated various impacts suggesting a cartwheeling motion with the glider coming to rest in the middle of the field. The tail had become detached; the left wing structure had fractured and there was extensive damage to the nose and cockpit area. When the AAIB arrived at the scene, some of the glider's parts had been collected by the pilot and placed in a pile near the main wreckage. Further debris was still scattered about the field.

**Figure 2**

Accident site and the gliders attitude at first ground impact

Recorded information

Flight data was downloaded from two avionics devices recovered from the glider. An LXNAV S10 variometer recorded Global Navigation Satellite System (GNSS) position data, pressure altitude, environmental noise level (ENL), and true airspeed (TAS) once per second for the whole flight and continued recording for a short period after the accident. The data recorded to an external microSD card, which contained 85 logs for flights since February 2023.

An LXNAV LX9070 Display Unit also recorded the above parameters, and additionally the pitch attitude, roll, wind speed and direction. The LX9070 received GNSS data from a separate antenna to the S10. Data saved to the LX9070 included the accident flight, and 89 previous flights since February 2023. A logbook text file, generated by the unit, contained flight times, the calculated average speed and distance flown, amongst other parameters.

The glider was also equipped with a Front Electric Sustainer (FES) propulsion system (see *Aircraft Information* section). Although this system had no recording functionality, its use is associated with an increase in the ENL recorded by both of the glider recording devices. The LX9070 also wrote a total “engine duration” for each flight to the logbook file. This “engine duration” appeared consistent with the periods of high ENL recorded in the S10 and LX9070 recordings for the accident flight, and for previous flights which the AAIB reviewed.

Accident flight

Figure 3 shows a composite illustration of the GNSS ground track for the last 2 minutes of the flight, with logged flight data parameters recovered from the S10 and LX9070. The terrain elevation in the altitude plot is based on data available from the Department for Environment, Food and Rural Affairs (DEFRA)¹.

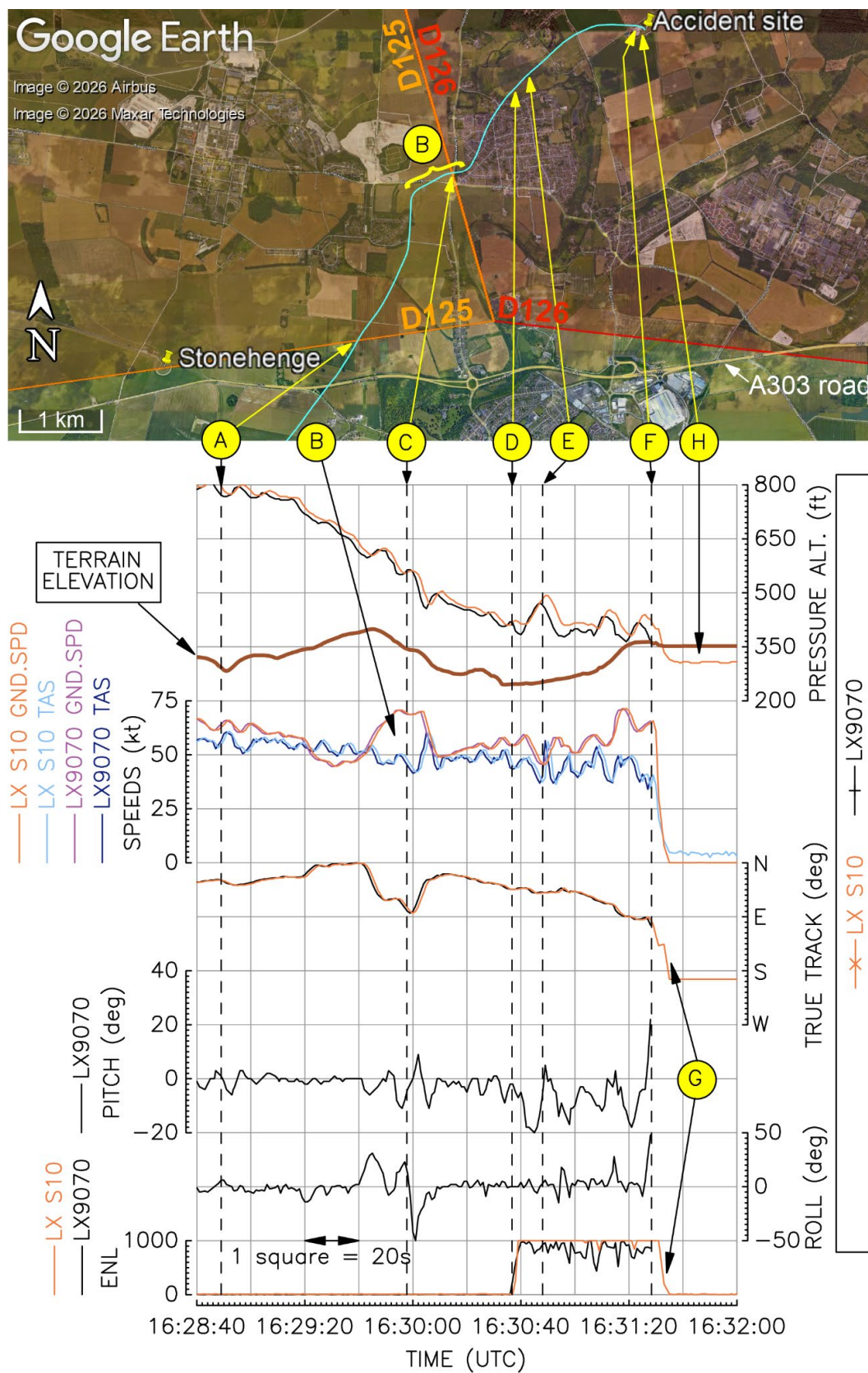
Points A to H indicate the following events:

- Point A: G-CMMG flies into the EGD125 (Larkhill) Danger Area at 1628:48 hrs.
- Area B: G-CMMG was flying with tailwind of about 20 kt whilst flying due east.
- Point C: G-CMMG crossed into the EGD126 (Bulford) Danger Area at 1629:58 hrs.
- Point D: At 1630:37 hrs, at about 170 ft agl, ENL rose from around zero, reaching a maximum 2s later, indicating that the FES was running. The descent appeared to cease. The TAS was 44 kt and the groundspeed was 55 kt.
- Point E: Vertical speed increased sharply and G-CMMG gained about 100 ft, followed by a reversal into a descent and drifting to an eastward track.
- Point F: The LX9070 stopped recording at 1631:28 hrs. The last data point logged was a 48° right roll, 22° nose-up attitude, 3 m/s sink rate, and TAS of 40 kt. The S10 recorded a TAS of 34 kt and 4 m/s sink rate. The data indicated a tailwind of about 25 kt.
- Point G: The S10 continued recording. The data indicated a sharp track change towards the south, a sink rate of -16 m/s, and ENL going to zero.
- Point H: The S10 logged pressure altitude settles at 308 ft amsl and sink rate settled to zero. The accident site elevation was 351 ft amsl.

The recorded S10 and LX9070 pressure altitudes were similar throughout the flight until the final few seconds, where the values began to differ. The LX9070 data stopped at an altitude coincident with the ground elevation, whilst the S10 indicated a slightly higher altitude, before settling at a value below the accident site elevation. The reasons for this were not determined.

Footnote

¹ LIDAR Composite Digital Terrain Model data, available at <https://environment.data.gov.uk/survey> [accessed April 2026].

**Figure 3**

Composite of the gliders track and Danger Areas overlaid on satellite imagery (top), and pertinent parameters recorded by the onboard avionics (bottom)

Use of the FES for the accident flight compared to previous flights

On the accident flight, the recorded ENL parameter rose from a low level to its maximum at about 1630:39 hrs (Point D in Figure 3) as the glider descended below about 410 ft amsl, which corresponded with a height of about 180 ft agl.

The ENL parameter was reviewed for previous flights to understand if the pilot had a pattern for using the FES. In previous flights where the FES was used, the data indicated that the pilot normally activated it when he was descending away from the airfield, usually in the range between 700 ft amsl and 1,000 ft amsl. Accounting for terrain elevation at the respective locations, this corresponded to a range of between 600 ft agl and 850 ft agl.

Distress & Diversion (D&D) Cell communication system

The Distress and Diversion Cell, based at the London Air Traffic Control Centre, uses a Voice Communications & Control System (VCCS) which records all air-ground radio and ground-ground telephone exchanges made using this system. For air-ground radio communication the D&D Cell personnel select the frequency or ground unit they wish to contact using the VCCS electronic touchscreen. In the case of telephone communication, the user selects the organisation they wish to call from a pre-defined list, and the associated telephone number, configured into the VCCS, is dialled automatically. The VCCS does not allow the user to manually enter a telephone number. Should the D&D Cell personnel need to use a telephone number not configured into the VCCS, a separate wall-mounted telephone, located behind the D&D Cell controller consoles, was available for this purpose.

Impound process & absence of wall-mounted telephone recordings

Due to the complex nature of the UK airspace and its technology evolution over time, some Air Traffic Service Units within NATS use different technology platforms. Hence, the communications systems and their recording systems may also differ between one unit and another. When the AAIB requests an impound of all the audio recordings from the various communication systems, it relies on the expertise within NATS to identify all the appropriate recording sources, since the AAIB (or the CAA) do not have the knowledge to make this determination.

Therefore, when the AAIB requires recordings from NATS to support an investigation, the AAIB submits an impound request to the Civil Aviation Authority's Transcription Unit (TU), who in turn instruct NATS to impound recordings on behalf of the AAIB. NATS then assesses the request from the TU, identifies the appropriate recorded communication channels relevant to the request, and impounds them from the respective recording system(s) accordingly. NATS then provides a copy of the impounds to the TU, who have dedicated equipment to convert them into a digital format for the AAIB. The AAIB obtained recordings of radio and ground telephone communications to and from the D&D Cell for this event, which are referred to throughout this report.

It came to light during the investigation that recordings from the wall-mounted telephone in the D&D Cell were not included in the impound that was provided to the TU. By the time

this finding was made, the retention period for which NATS is required to store recorded communications had expired². Therefore, some pertinent recordings were not available to the investigation. An internal investigation by the NATS safety investigations department found that, although the wall-mounted telephone was recorded, it is recorded to a different system to the VCCS system. This was not identified by the NATS personnel handling the impound request at the time, and hence recordings from the wall-mounted phone were not impounded and supplied to the TU.

As a result of this finding, NATS is reviewing the impound process to ensure it captures all the recording requirements and identification of the relevant recording sources. The team responsible for impounding recordings have also been made aware of this finding, which has subsequently been used as a training exercise.

Aircraft information and performance

The DG Aviation LS8-e neo is a single-seat, high-performance composite motor-glider designed for competition flying. The glider was equipped with an electrically powered sustainer system and water ballast tanks along with various navigation and monitoring avionic devices. The pilot was wearing a parachute on the day of the accident.

Front Electric Sustainer

G-CMMG was fitted with a FES system which consisted of a foldable, two-bladed propeller driven by a brushless electric motor installed in the nose of the glider. The motor was powered by two Superior Lithium Polymer GEN2 battery packs with a combined capacity of 4.2 kilowatt-hours and fitted with an internal battery monitoring system. The manufacturer states that with fully charged batteries, it will enable the motor to run for around one hour in level flight.

The performance figures in the Flight Manual (FM) indicate that with the batteries fully charged, the best rate of climb available at the weight of 435 kg is approximately 350 ft/min, reducing as the battery voltage decreases to around 235 ft/min as the batteries approach empty. The FM suggests that to gain the maximum altitude, the power should be maintained at around 15 kW rather than full power as a better overall efficiency can be achieved at a lower power setting. Using the best climb speed of 51 kt, the glider with 15 m wings and 435 kg should be able to climb a total of around 4,100 ft. It is probable that G-CMMG was heavier than the 435 kg, so the actual climb rate and maximum altitude gain would be less than those quoted. The rate of climb provided by the FES can also be limited by the atmospheric conditions during operation. If turbulent conditions are encountered this can reduce or even eliminate any positive rate of climb generated.

Footnote

² CAP 670 Air Traffic Services Safety Requirements, Part C, Requirement COM01.13 requires that 'recordings shall be retained for a minimum of 30 days.' <https://www.caa.co.uk/publication/download/17362> [accessed February 2026].

Water ballast

The LS8-e glider is equipped with a water ballast system to increase the weight of the glider and thereby change the speed at which the best lift to drag ratio occurs. The increase in weight will affect climb performance but the increase in speed may give an overall advantage in competition flying. The amount of water added would depend on factors such as the pilot's experience and the weather. It is probable that given the conditions on the day of the accident, some water ballast was added to G-CMMG, but the investigation could not determine how much.

The water ballast system consists of five separate tanks: an inboard and outboard integral wing tank of 79 litres and 16 litres respectively and a fuselage tank in the tail section of 7.5 litres. This allows the weight of the glider to be increased by up to 197 kg using water and is included in the overall takeoff weight of the glider. A single cockpit mounted lever simultaneously operates a dump valve in each tank to allow in-flight dumping of the water ballast. It takes approximately three minutes to drain the tanks from full and the manufacturer states that water ballast should be dumped before an airfield or gliding site landing and must be dumped before an off-site landing. The FES performance data in the FM is valid without water ballast, and it is recommended to dump the water before using the FES.

Stall speeds and characteristics

The LS8-e FM describes the glider as having a slight tail shudder prior to a stall. Should the angle of attack be increased further, a symmetrical or asymmetrical stall may result. The glider recovers quickly from a stall with little loss of altitude by pushing the stick forward and using rudder to stop a wing from dropping further. The FM states that the FES system does not have a noticeable effect on the stall warning buffer. Other pilots who had flown the glider type suggested that with the FES running, the stall warning may be less noticeable due to the airflow from the propeller.

The FM gives a stalling speed with the 15 m wingspan at the estimated weight, without water ballast, of 435 kg, as between 42 and 43 kt. This would increase by 4 kt with the airbrakes extended. If the glider had water ballast onboard up to the maximum takeoff weight of 525 kg, then the stall speed without airbrakes would be 47 kt.

Aircraft examination

The preliminary examination of the glider at the accident site identified that the tail and left wing had suffered major structural failure from striking the ground (Figure 4). There was further damage to the horizontal stabiliser, and both wingtips had detached. The cockpit was extensively damaged, and the canopy had detached with the transparency shattered. Control surface continuity checks verified that all the surfaces were still connected.



Figure 4

G-CMMG at the accident site

The glider was recovered to the AAIB where a more detailed examination was performed. A search of the cockpit area revealed a parachute and hydration backpack with an intact 1.5 litre reservoir and containing approximately 1.35 litres of water.

A detailed inspection of the structure revealed that the cockpit had sustained a heavy impact on the front right side which had detached the FES motor. The motor had been retained by the large diameter electrical cables. The remaining cockpit structure was predominately intact with evidence at the top of the rear left side that a significant injury had been sustained by the pilot. The tail section had detached approximately 30 cm behind the trailing edge of the wing, with the fracture showing tension overload on the left side and crushing with buckling on the right side. The horizontal stabiliser was damaged on both ends with significant sections detached. The fuselage water ballast tank was empty. The left wing had failed inboard of the airbrake, and the outer section was retained by the control surface cables. The evidence suggested that it failed by downward bending. Both wingtips were damaged with the right side showing abrasion in the direction of flight. The left had been predominantly removed. All wing water ballast tanks were empty with their integrity comprised by the damage sustained. The blades of the FES system were examined and there was evidence of dirt and staining on the leading edge of the blades that suggested that the FES was operational when it struck the field (Figure 5). The investigation did not establish the remaining power of the battery packs.



Figure 5
FES Propeller blades

Survivability

The competition staff were able to watch the gliders by tracking them using their FLARM³ signals. They observed that the accident pilot was still a significant distance from returning to the airfield when he was at a low altitude and considered it likely that he was going to land in a suitable field. When they noted that he was no longer tracked, they felt he would need around 30 minutes to complete the landing, sort out the glider and make contact with the landowner. Once those tasks were complete, they expected the pilot to contact the gliding club, and a retrieval team could then be arranged.

After the 30 minutes had passed with no contact from the pilot, the gliding club initiated their emergency plan for an overdue aircraft. The steps of this procedure required them to contact the D&D Cell. The procedure stated that the contact was needed to *'Explain the situation, ask if they have had any reports, seek and follow their advice.'* Contact with the D&D Cell was made at 1702 hrs where details of the glider, pilot and last known position were passed, as well as the mobile telephone number of the competition staff reporter so that the D&D Cell could contact him directly. The gliding club also dispatched one of the aerotow aircraft to the vicinity of the glider's last known position.

The competition staff had continued to call the pilot's mobile telephone, which was ringing but remained unanswered. Around 1721 hrs the pilot answered his phone, who was described as sounding disorientated and shaken. The phone was passed to the farmer who was with the pilot. The farmer had discovered the pilot sometime between 1705 hrs and 1720 hrs. He reported that the glider was damaged, and the pilot seemed dazed and had a head injury that was bleeding. The farmer provided the postcode of the site and his

Footnote

³ FLARM is an electronic conspicuity and data transmission system. Developed as a collision avoidance system for gliders, every second it broadcasts a prediction of its own three-dimensional position over the next 30 seconds.

mobile telephone number stating he would meet and direct the emergency services when they arrived. The gliding club informed him that they would call the ambulance service and pass on the details.

At 1726 hrs the competition staff contacted the D&D Cell again to notify them that the aircraft had crashed. The gliding club asked the D&D Cell personnel whether they needed to call the emergency services since that was the next item on their emergency plan, but they were assured by the D&D Cell that they would coordinate that. Information passed to the D&D Cell included the mobile number of the farmer who was with the pilot, and that the pilot required an ambulance as he had a cut on his head which was not thought to be life-threatening. The call ended at 1729 hrs. It was understood by the competition staff that the D&D Cell would be calling the emergency services and, therefore, that they did not need to do so as well.

During the period between the first call from the gliding club at 1702 hrs and the second call at 1726 hrs, the D&D Cell had tried to contact several local airfields in an attempt to locate the glider but had been unsuccessful as they were all closed. Once the D&D Cell were aware of the accident, they contacted the Joint Rescue Coordination Centre (JRCC) at 1728 hrs, passing details of the location of the accident as well as the injuries to the pilot. However, the injuries were now described as "THE PILOT'S UP AND WALKING AROUND WITH A SMALL CUT TO THEIR HEAD." The role of the JRCC amongst other things is to manage the tasking of the network of Search and Rescue (SAR) helicopters. The JRCC asked the D&D Cell if such a response was needed, to which they replied that SAR was not required but that the emergency services were. The JRCC asked if the emergency services had been called, which they had not been, and the D&D Cell stated that they were expecting to do that through the JRCC. The JRCC stated that it would be much better if the farmer who was with the pilot called, as that would allow the ambulance service to triage the call more effectively. The D&D Cell replied that they would call the farmer and ask him to call 999. Evidence from the D&D Cell indicated that they did attempt to call the farmer without success on the wall-mounted telephone, but it is not possible to know what number they called or how many times they tried, as the recordings from this telephone were not made available to the investigation.

At 1731 hrs the D&D Cell used the VCCS to call the gliding club to provide an update. In using the VCCS panel, they did not call the competition staff reporter directly, despite having his mobile telephone number, but instead used the pre-programmed telephone number for the airfield. This put them through to the airfield reception telephone, which was not located in the same place as the gliding club competition staff dealing with the accident. The person who answered was unaware of any of the details of the event that had occurred. The D&D personnel stated that the pilot was "FINE, THEY'RE UP AND WALKING" despite having no further information on the condition of the pilot than that which the competition staff had supplied to them in the call at 1726 hrs. The gliding club receptionist asked if there was anything further they needed to do and the D&D Cell replied that there was not.

Sometime after 1730 hrs, the farmer was becoming increasingly concerned for the welfare of the pilot. By chance another local resident arrived at the farm who was medically trained,

and she immediately made the pilot sit down. On examining him, she determined that urgent medical assistance was required. She rang 999 and was connected to the ambulance service at 1748 hrs. This was the first call that any of the emergency services had received regarding the accident and the ambulance service then proceeded to notify the police and fire service with the air ambulance tasked at 1753 hrs. The police were first to arrive on scene at 1758 hrs, with the first ambulance on scene at 1812 hrs and the air ambulance arriving at 1826 hrs. The pilot had significantly deteriorated since the accident, and he was airlifted to Southampton General Hospital. He had suffered a life-threatening head injury as well other serious injuries and was admitted to intensive care.

The National Institute for Health and Care Excellence (NICE) recommends that immediate medical advice is sought if there is concern for a person who has suffered a head injury⁴ regardless of the severity. The pilot was variously described as confused, dazed, disorientated as well as having a cut which was bleeding which could indicate a forceful strike to the head. All those indicators would meet the NICE requirements for a referral to a hospital emergency department, using an ambulance if necessary. Untreated head injuries can cause irreversible brain damage. Rapid specialist treatment can reduce the risk of serious long-term damage or death.

Weight and balance

It was not possible to exactly calculate the weight of G-CMMG either at takeoff or for when the accident occurred. An estimate of the weight of the glider, pilot and kit gave a takeoff weight of 435 kg, but it is probable that the pilot also loaded some water ballast for the flight which may have increased the takeoff weight up to the maximum permitted of 525 kg.

Meteorology

There were generally settled conditions over most of England on the day of the accident with a moderate to fresh westerly wind. There was some convective activity across the area during the day which resulted in varying cloud amounts and heights. There was forecast thermal activity throughout the area until 1800 hrs. The temperature in the area reached a maximum temperature of 19°C in the west with the rest of the area being 17°C or 18°C. The air temperature at 2,000 ft was forecast to be around 10°C.

The wind at RAF Odiham, which is approximately 4.5 nm from Lasham, was recorded as westerly between 16-19 kt with the occasional gust up to 23 kt. The wind at MOD Boscombe Down was similar, although the average wind speed reduced throughout the day to around 15 kt. The Met Office has an automatic weather station at Larkhill Camp which is around 2 nm from the accident site. This records synoptic observations hourly which includes cloud cover and wind speed/direction. At 1500 hrs the station recorded two oktas of cloud at 5,000 ft. By 1600 hrs this had increased to four oktas at 4,500 ft. The wind between 1500 hrs and 1700 hrs was recorded as westerly at 14 kt with the occasional gust during the period up to 28 kt.

Footnote

⁴ NICE Guideline NG232, "*Head injury: assessment and early management*," available at <https://www.nice.org.uk/guidance/ng232/chapter/Recommendations#pre-hospital-assessment-advice-and-referral-to-hospital> [accessed December 2025].

Pilot

Experience

The pilot was an experienced glider pilot who had flown in other competitions as well as overseas. He had owned G-CMMG for around 18 months and had flown nearly 200 hours in the glider before the accident. He was a qualified gliding instructor and held a valid unrestricted CAA Class 2 medical certificate.

The pilot had been gliding for around 15 years, during which time he had landed out from airfields numerous times. Although glider pilots rarely plan to land out, it can be a regular part of the sport. As G-CMMG was fitted with a FES, the pilot developed a procedure whereby once the glider had descended to between 700 ft amsl and 1,000 ft amsl away from the airfield, he would turn on the FES to allow him to land back at the airfield. Evidence from the previous flight recordings showed that he consistently followed this procedure.

Status of the pilot

The pilot had no recollection of the time he spent at Lasham including the day of the accident flight. He was camping at Lasham for the competition and although he could not recall it, he felt it was likely that he did not sleep well in his tent. It was not his normal habit to take food with him on a flight, but instead to eat well before he departed. No food or wrappers were found amongst the wreckage. He did take water with him in a hydration backpack although the pack was found to be virtually full after the accident. Other pilots who knew him well and had flown with him suggested that he always kept himself well hydrated during the flight and that he was known to suggest to others that they needed to drink more.

Flight route and procedures

The latter stages of the flight contained several features which did not fit with the experience and normal practice of the pilot. Having flown to the first turning point he turned to route roughly north-east. Although he did manage to gain some height thermalling along the Great Ridge to the west of Salisbury, by the time he approached the A303 he was below his usual 1,000 ft amsl to start the FES. Both before and after crossing the A303, there were numerous large fields suitable for a landing into wind had an attempt to start the FES been unsuccessful. As the pilot crossed the A303 he entered the Salisbury Plain Danger Areas EGD125 & EGD126, both of which extend upwards from the ground surface and are operational 24 hours a day. The pilot was aware of the danger areas as he had asked an instructor based at Lasham to explain them to him and they would also have been clearly marked on the cockpit navigation display. As the glider descended, the flight continued downwind at relatively high speed over numerous fields suitable for landing out. Even in the last few seconds of the flight, as the glider descended towards the ground, there was no evidence that the pilot was deliberately manoeuvring the glider into wind for a specific field in which to land.

Incapacitation

Incapacitation can be partial or complete. With partial incapacitation a pilot may be able to operate the aircraft, but their decision making may be impaired. The cause of such a partial

incapacitation may be medical, or it may be related to human performance factors such as hydration, nutrition or fatigue. The impairment of decision making may lead a pilot to make inappropriate decisions or to make no timely decisions at all. The pilot may act in a way that does not reflect the situation or their experience.

Pilot health and performance

The CAA has published Safety Sense Leaflet 24 '*Pilot Health and Performance*'⁵ to provide guidance on health risks associated with GA flying and how to stay healthy as a pilot. The BGA also has medical information guidance material on their website member area⁶. Both organisations promote the use of the mnemonic '*I AM SAFE*' to be used by pilots to self-assess if they are fit to fly.

- I – Illness
- A – Attitude
- M – Medication
- S – Stress
- A – Alcohol
- F – Fatigue
- E – Eating

Organisational information

Airfield emergency plan

The gliding club had an emergency plan which covered overdue aircraft, accidents on and off the airfield as well as injuries to persons. The plan was printed and easily available to all those who might require it. The club followed the appropriate plans as the situation with G-CMMG developed which included the requirement for the club to call the local police but, after talking to the D&D Cell, this step was omitted. As a result of this accident, the BGA took safety action to:

Remind gliding clubs that if their emergency plans require them to call the emergency services, then they should do so, even if they believe that another person or organisation is going to do so.

D&D Cell

The D&D Cell is a military air traffic control unit based at the London Area Control Centre at Swanwick and is a collaboration between the military and civil providers. The unit is exclusively staffed by military personnel who use equipment owned by the civil air navigation service provider. In common with most military units, there is a continual movement of personnel between roles and units, resulting in a higher staff turnover than might be expected at a similar civilian organisation. It is also possible that, as a military unit, the

Footnote

⁵ https://www.caa.co.uk/media/dvfk0ogj/safetysense_pilot_health.pdf [accessed August 2026].

⁶ <https://members.gliding.co.uk/medical-2/> [accessed August 2026].

culture and ethos of the D&D Cell may differ from the civilian partners they work with. The service provided is described in CAP 413 *'Radiotelephony Manual'* as unique to the UK⁷.

The D&D Cell orders include instructions for the actions to be taken when an aircraft is reported as overdue and there is a suggested list of methods to trace an aircraft which includes requesting the assistance of the civilian police. The personnel are to record all the information related to an event on a tracing action form. The tracing action form for G-CMMG did not include all the details passed on during the recorded calls, nor were the times accurate for the actions listed. The form did record that the D&D Cell had been informed by the gliding club that the pilot had suffered a head injury.

An aircraft accident proforma received by the AAIB on the day of the accident stated that:

'At 1721Z [sic], D&D received a second phone call from Lasham stating that the pilot had been in contact with them and had crashed in a field near the village of Milston, and had sustained a head injury, however, the pilot was up and walking and had received assistance from a local farmer. The emergency services were informed of this immediately and the police and ambulance services attended soon after. No further action was taken.'

Subsequent AAIB inquiries confirmed that no call to any of the emergency services had been made by the D&D Cell. Information from the D&D Cell personnel suggested that they believed that the responsibility for that call (or to any of the emergency services) was held by JRCC rather than themselves. As a result of this accident the D&D Cell revised their procedures taking safety action to:

Update the Serious Incident Proforma to include - *'If Medical/ Fire services required, advise caller, someone at the scene should call 999 for emergency services immediately.'*

In 2023 the AAIB made three Safety Recommendations regarding the D&D Cell after an accident involving G-BXBU⁸. As a result of one of these Safety Recommendations (2023-015), the CAA published a Supplementary Instruction to CAP 493 *'Manual of Air Traffic Services (MATS) Part 1'*⁹ and CAP 797 *'Flight Information Service Officer's Manual'*¹⁰ to clarify the role of the D&D Cell. The amendment details the services that the D&D Cell will provide in addition to their military role. One of these roles is:

'[to] coordinate and facilitate the exchange of information between agencies involved in the handling of emergency aircraft: these may include other ATS units, the emergency services and the Joint Rescue Coordination Centre (JRCC).'

Footnote

⁷ <https://www.caa.co.uk/our-work/publications/documents/content/cap-413/> Section 8.7 [accessed August 2025].

⁸ <https://www.gov.uk/aaib-reports/aaib-investigation-to-mudry-cap-10b-g-bxbu> [accessed August 2025].

⁹ <https://www.caa.co.uk/data-and-publications/publications/documents/content/cap-493/> [accessed March 2026].

¹⁰ <https://www.caa.co.uk/our-work/publications/documents/content/cap-797-si-202401/> [accessed August 2025].

Further information is provided in the 'UK Aeronautical Information Publication' which states that:

'When D&D has reason to believe that an aircraft is in a state of emergency, it will alert the JRCC who will, in turn, alert SAR units and the Police (D&D may alert the Police directly in extremis if appropriate to do so); the police will notify civilian MRT, fire, ambulance and hospital services'¹¹.

As a military unit, the D&D Cell is not subject to oversight from the CAA, despite providing a service to the civil aviation community in the UK. The responsibility to ensure the D&D Cell is providing the required level of service, detailed in ICAO Standards and Recommended Practices, is delegated by the Department for Transport (DfT) to the Ministry of Defence. The D&D Cell is therefore subject to operational oversight by the Military Aviation Authority (MAA).

The investigation found no evidence that the occurrence was reported through the D&D Cell's internal safety reporting processes, nor that it was escalated to the MAA or the Defence Safety Authority (DSA). As a result, no formal post-event review was conducted, and the organisation was unaware that lessons could be learnt from the handling of the incident until contacted by the AAIB.

Technologies to assist the D&D Cell tracing actions

Tracing actions undertaken by the D&D Cell may involve requesting a radar replay from NATS for the timescale and approximate area of interest (if known). A NATS specialist then provides the D&D Cell with the replay available on a laptop to assist with tracing the aircraft's last known position.

There are several publicly available online aircraft tracking sources which can assist with determining an aircraft's last known location for the purposes of expediting a SAR or police search response. Most of these sources rely on Mode-S transponders, ADS-B transmissions from the aircraft and using satellite and/or ground-based receivers. Examples include Flight Radar 24, FlightAware, or ADS-B Exchange, amongst others. Some of these services offer subscription packages costing a few hundred pounds per year, which provide enhanced functionality such as the ability to view and download data; replay historic flights; and customise filters or views. The D&D Cell informed the AAIB that some of these tracking services are routinely used on a non-subscription basis via applications installed on a tablet available in the D&D Cell.

Since gliders are often not ADS-B or transponder equipped, they may not be visible to ADS-B tracking platforms. However, there are other online tracking sources which utilise other technologies, such as FLARM, which is widely fitted to gliders. Some examples include Glide and Seek or Glider Net Live. When the AAIB asked the D&D Cell about these other sources, they responded that it did not use them and were not aware that the

Footnote

¹¹ <https://www.aurora.nats.co.uk/htmlAIP/Publications/2025-08-07-AIRAC/html/index-en-GB.html> Section 3.6.6.1 [accessed August 2025].

technology differences consequently mean that any single web tracking source will not track all aircraft. As a result of these enquiries, the D&D Cell has taken safety action to:

Install a glider tracking application onto its tablet hosting public aircraft tracking sources and update its procedures to reflect this addition.

JRCC

The JRCC is responsible for tasking SAR resources such as the coastguard and coastguard aviation assets, as well as coordinating the response for locating or rescuing persons in distress. The response can be considered as a two-phase process with locating the scene as the first part followed by the rescue phase.

In the case of a maritime emergency, the JRCC has the capability to locate a vessel using a variety of systems as well as to coordinate the response required. They are therefore the sole organisation responsible for the UK maritime SAR system. In the case of an aeronautical emergency, it is the D&D Cell who have responsibility for locating the aircraft with distress monitoring on VHF/UHF frequencies and from primary and secondary radar feeds. The JRCC remain responsible for the rescue phase if a SAR asset is required, but should the aircraft accident occur on land and the accident does not require the use of a SAR asset (as was the case with G-CMMG) then responsibility for coordinating the response rests with the police. Therefore, the responsibility of the UK aviation response can be split between two organisations: the D&D Cell and the JRCC.

The JRCC aeronautical operating procedures for an aircraft accident in a confirmed location, which were in force at the time of the G-CMMG accident, required JRCC to:

'Inform relevant emergency services of incident, and JRCC-AR response (if crash site on-land, inform the relevant police service and Fire and Rescue service. If crash site at sea, inform HM Coastguard maritime operations).'

The JRCC has direct links to the control rooms of most UK police forces so that this step can be completed as expediently as possible without having to utilise the 999 telephone system. Once the JRCC had been informed by the D&D Cell at 1728 hrs of the location of the accident, then by following their procedures, they should have contacted the local police force directly. The JRCC does not have a direct link to any of the UK ambulance control rooms and therefore would have to use the 999 emergency number to access this service like a member of the public.

The JRCC also had not conducted any review of the event as they considered their involvement to be of minimal and peripheral in nature. They were not aware of the length of time before the emergency services were called, nor that the D&D Cell had not managed to contact the farmer. JRCC was not updated by the D&D Cell of the final outcome of the event, nor were they required to be. Therefore, there was no opportunity to review the communications or coordination after the event.

Other information

In 2017, the AAIB investigated an accident involving G-CEOF and published its report in 2018¹². The report contains safety action taken by the D&D Cell which included a broad review of their procedures and the production of a standard checklist. The safety actions were intended primarily to improve record keeping and reduce duplication among the organisations involved.

The DfT also took safety action to review the process and procedures of the D&D Cell and the JRCC. This review was completed in 2019, and an internal DfT report highlighted that there was evidence of challenges in communication and coordination between the two organisations. A recommendation was proposed that the D&D Cell and the JRCC undertake regular, joint training exercises. The AAIB investigation found no evidence that such training exercises have taken place.

Analysis

Final manoeuvre

During the final part of the flight the airspeed began to reduce to around that at which the glider would stall. Had the glider also still contained any water ballast, this stall speed would have been higher due to the increase in weight. Whilst the glider type recovers quickly from a stall, at low altitude, perhaps with the glider in a turn, an asymmetric stall could result in the high angle of bank evidenced by the first ground marks made by the glider. Whilst the FM states that the FES running has no noticeable effect on stall warning, other pilots reported they felt that there was less warning due to the airflow from the propeller. It was not possible to determine if the water ballast was deliberately dumped prior to the accident or if the tanks had emptied as a result of structural damage sustained in the accident.

Pilot status

Given the experience and normal practice of the pilot, the last section of the flight when the glider descended below 1,000 ft amsl was seemingly out of character. Those who knew the pilot, as well as data from previous flights, indicated that it would have been normal practice for the FES to be started and the glider either climbed to return to the airfield or to position for a landing out, neither of which happened on this flight. Allowing the speed to decay so close to the ground would also seem to be at odds with his experience on type and his extensive previous flying. The glider also entered two Salisbury Plain Danger Areas despite them being clearly shown on the display in the cockpit and the pilot having been briefed on them by an instructor at Lasham. This evidence suggests that it is possible that the pilot was suffering from some kind of incapacitation.

The pilot held a valid Class 2 medical, and there was nothing in his medical records from either before or after the accident to suggest any likely medical cause of such an incapacitation. Although he had no recollection of his time at Lasham, he felt that he would

Footnote

¹² <https://www.gov.uk/aaib-reports/aaib-investigation-to-piper-pa-28r-201-cherokee-arrow-iii-g-ceof> [accessed March 2026].

not have been sleeping well in a tent. He had also likely not eaten anything since takeoff, nor had he drunk much, if anything, from the hydration backpack. Given the pilot had been airborne for almost five hours, probably concentrating on his flight, it is possible that either the lack of sleep, and/or the lack of hydration and nutrition caused him to become partially incapacitated in some way. This may have manifested itself in impaired decision making and led to the glider being flown at very low altitude, downwind with few options left to the pilot.

Response to the accident

The pilot suffered a life-threatening head injury in the accident as well as other serious injuries. NICE recommends that immediate medical advice is sought if there is concern for a person who has suffered a head injury. In this case the pilot was variously described as confused, dazed, disorientated as well as having a cut which was bleeding which could indicate a forceful strike to the head. All those indicators meant that immediate medical advice should have been sought. The risk of a serious head injury resulting in death or a serious long-term damage can be reduced with rapid specialist treatment.

There were several parties who could have alerted the emergency services once the pilot had been found, but confused communications meant that these parties all believed someone else was going to take responsibility. The farmer, who found the pilot, believed that the gliding club was going to call the police. The gliding club were reassured by the D&D Cell that they would coordinate the response. The D&D Cell believed that it was the responsibility of JRCC to notify the emergency services and not for them to do so. The JRCC did not notify the police, even though it was a required step in their operating procedures. The Maritime and Coastguard Agency (MCA) have taken the following safety action:

The Maritime and Coastguard Agency have amended the Joint Rescue Coordination Centre procedures to require positive confirmation and recording of the completion of critical actions, including notification of emergency services.

It is believed the D&D Cell tried unsuccessfully to contact the farmer after the call with the JRCC, to request that he contact the ambulance service, but this could not be verified as the call recordings were not made available to the investigation.

As a result of the confusion of responsibilities, emergency medical assistance did not reach the pilot until approximately one hour and 30 minutes after the accident. Had any party called the emergency services when they were first aware of the accident and its location, this may have resulted in emergency assistance arriving around 25 minutes earlier than occurred. It is not possible to know if this delay meant the pilot's injuries were more serious than if that assistance had arrived more promptly. Both the BGA and the D&D Cell have taken safety action to address the issues identified in this investigation.

Despite safety actions taken as a result of previous investigations and Safety Recommendations made by the AAIB, confusion remains between the D&D Cell and the JRCC as to their responsibilities after an aircraft accident is reported. In the UK, when

an aircraft accident occurs on land, rescue coordination is the responsibility of the police. However, for the police to fulfil this role, they must first be notified of the accident. In the case of G-CMMG, this notification was missed by all the parties including the JRCC, for whom it was a required procedure. The division of responsibilities between the two organisations with their different operating procedures contrasts with the maritime side where the JRCC hold sole responsibility. In the case of an aircraft accident, particularly on land, whilst both organisations have roles to play there is not a single organisation accountable for the overall outcome.

This investigation, and the previous AAIB investigations into G-BXBU and G-CEOF, indicate that there are continued challenges regarding the core purpose of the D&D Cell in acting as a communications point between various agencies. This is likely compounded by differences in culture and ethos, working practises, frequent personnel rotation in military units and a lack of shared technology. The communication between the D&D Cell and the JRCC, and from the D&D Cell with Lasham, showed evidence that information was altered over the duration of the accident response due to a lack of standardised communication protocols and robust record keeping. The lack of accurate record keeping meant that the communications were often based on assumptions as demonstrated by the call from the D&D Cell to Lasham Airfield using the pre-configured phone number for Lasham in VCCS, rather than calling back the original reporter in the competition staff. The use of standardised language for the exchange of important information minimises the risk of miscommunication, the change of information over time, and makes record keeping more straightforward as a standard proforma or record sheet can be used. Such a standardised communication protocol could include, but is not limited to location accuracy, injury status, aircraft type, notification of the emergency services and source reliability. Therefore:

Safety Recommendation 2026-017:

It is recommended that the Officer Commanding 78 Squadron Royal Air Force establish a protocol to standardise the language for the exchange of operational information between the Distress and Diversion Cell and other organisations, to facilitate a shared situational awareness by all involved parties.

The investigation found no evidence that this occurrence was reported through the D&D Cell's internal safety reporting processes, nor was it escalated to the MAA or the DSA. This indicates that the existing reporting arrangements did not identify an event involving a breakdown in inter-agency coordination and a delayed emergency response. No formal post-event analysis was conducted by the D&D Cell until they were contacted about the event by the AAIB. Consequently, the organisation did not identify any systemic weaknesses in communication, coordination and role clarity until a significant period after the accident. The JRCC also did not conduct any post incident review, nor was there any regular way of engaging with the D&D Cell to discuss the accident, communications between the parties and the eventual outcome.

Effective safety management relies on the systematic reporting, review and analysis of operational events to identify hazards and implement corrective action. In this case, those

processes did not capture or address the issues arising from the occurrence. These factors reduced the opportunity for organisational learning and may contribute to the persistence of systemic issues identified in previous occurrences. Therefore:

Safety Recommendation 2026-018:

It is recommended that the Officer Commanding 78 Squadron Royal Air Force ensure that the Distress and Diversion Cell implement effective arrangements for the accurate recording of operational events, the mandatory reporting and escalation of safety-related occurrences, and the conduct of formal post-event analysis, to inform appropriate oversight and organisational learning.

The Maritime and Coastguard Agency (MCA) have taken the following safety action:

The Maritime and Coastguard Agency have updated the operating procedures for the Joint Rescue Coordination Centre to ensure that effective arrangements are provisioned for the accurate recording of operational events, the mandatory reporting and escalation of safety-related occurrences, and the conduct of formal post-event analysis, to inform appropriate oversight and organisational learning.

As the D&D Cell are providing a service to civil aviation in the UK, particularly to General Aviation, it is important that information is gathered to assist in any review of service provision. Both the equipment fitted to aircraft, and mobile technology available to pilots, has significantly changed over the last ten years, and this continues to do so at a rapid pace. However, there appears to be no formalised mechanism by which these evolutions are evaluated in context of the service provided by the D&D Cell, nor have they been captured in any of the reviews which had taken place following previous AAIB investigations. For these reasons, the AAIB makes the following Safety Recommendation:

Safety Recommendation 2026-019:

It is recommended that the Civil Aviation Authority engage with the General Aviation community to review their requirements for the service provided by the Distress & Diversion Cell, given the significant technology changes since its inception, in order to inform stakeholder decisions regarding future emergency service provisions.

Conclusion

After nearly five hours of flying during a gliding competition, the glider struck the ground near the village of Milston in Wiltshire, and the pilot sustained a serious head injury. The last phase of the flight was not in keeping with the experience or normal practice of the pilot and therefore it was possible that the pilot was in some way partially incapacitated. The pilot was not discovered by the farmer for 30 to 45 minutes after the accident, and the subsequent delays in contacting the emergency services were due to confused communications between the parties involved in the response. Medical assistance did not arrive until nearly

one hour and 30 minutes after the accident. It is not possible to know if this delay had any effect on the pilot's medical condition.

Safety actions/Recommendations

The AAIB has made the following Safety Recommendations as a result of this investigation:

Safety Recommendation 2026-017:

It is recommended that the Officer Commanding 78 Squadron Royal Air Force establish a protocol to standardise the language for the exchange of operational information between the Distress and Diversion Cell and other organisations, to facilitate a shared situational awareness by all involved parties.

Safety Recommendation 2026-018:

It is recommended that the Officer Commanding 78 Squadron Royal Air Force ensure that the Distress and Diversion Cell implement effective arrangements for the accurate recording of operational events, the mandatory reporting and escalation of safety-related occurrences, and the conduct of formal post-event analysis, to inform appropriate oversight and organisational learning.

Safety Recommendation 2026-019:

It is recommended that the Civil Aviation Authority engage with the General Aviation community to review their requirements for the service provided by the Distress & Diversion Cell, given the significant technology changes since its inception, in order to inform stakeholder decisions regarding future emergency service provisions.

The following organisations took safety action to address issues identified in the investigation:

BGA

The BGA took action to remind gliding clubs that if their emergency plans require them to call the emergency services, then they should do so regardless even if they believe that another person or organisation is going to do it.

D&D Cell

The D&D Cell updated the Serious Incident Proforma to include - "If Medical/Fire services required, advise caller, someone at the scene should call 999 for emergency services immediately"

The D&D Cell has installed a glider tracking application onto its tablet hosting public aircraft tracking sources and has started updating its procedures to reflect this addition.

MCA

The Maritime and Coastguard Agency have amended the Joint Rescue Coordination Centre procedures to require positive confirmation and recording of the completion of critical actions, including notification of emergency services.

The Maritime and Coastguard Agency have updated the operating procedures for the Joint Rescue Coordination Centre to ensure that effective arrangements are provisioned for the accurate recording of operational events, the mandatory reporting and escalation of safety-related occurrences, and the conduct of formal post-event analysis, to enable appropriate oversight and organisational learning.

Published: 22 October 2026.