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# **AAIB Bulletin**

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# **2/2026**

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None

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**(ALL TIMES IN THIS BULLETIN ARE UTC)**

## AAIB Correspondence Reports

These are reports on accidents and incidents which were not subject to a Field Investigation.

They are wholly, or largely, based on information provided by the aircraft commander in an Aircraft Accident Report Form (AARF) and in some cases additional information from other sources.

The accuracy of the information provided cannot be assured.



## Accident

<b>Aircraft Type and Registration:</b>	Sonaca 200, G-LKDM	
<b>No &amp; Type of Engines:</b>	1 Rotax 914 F2 piston engine	
<b>Year of Manufacture:</b>	2022 (Serial no: 056)	
<b>Date &amp; Time (UTC):</b>	6 August 2025 at 1537 hrs	
<b>Location:</b>	Blackbushe Airport, Surrey	
<b>Type of Flight:</b>	Training	
<b>Persons on Board:</b>	Crew - 1	Passengers - None
<b>Injuries:</b>	Crew - 1 (Serious)	Passengers - N/A
<b>Nature of Damage:</b>	Right wing extensively damaged and canopy shattered. Nose landing gear broken off. Damaged beyond economic repair	
<b>Commander's Licence:</b>	Student	
<b>Commander's Age:</b>	23 years	
<b>Commander's Flying Experience:</b>	20 hours (of which 20 were on type) Last 90 days - 20 hours Last 28 days - 4 hours	
<b>Information Source:</b>	Aircraft Accident Report Form submitted by the pilot	

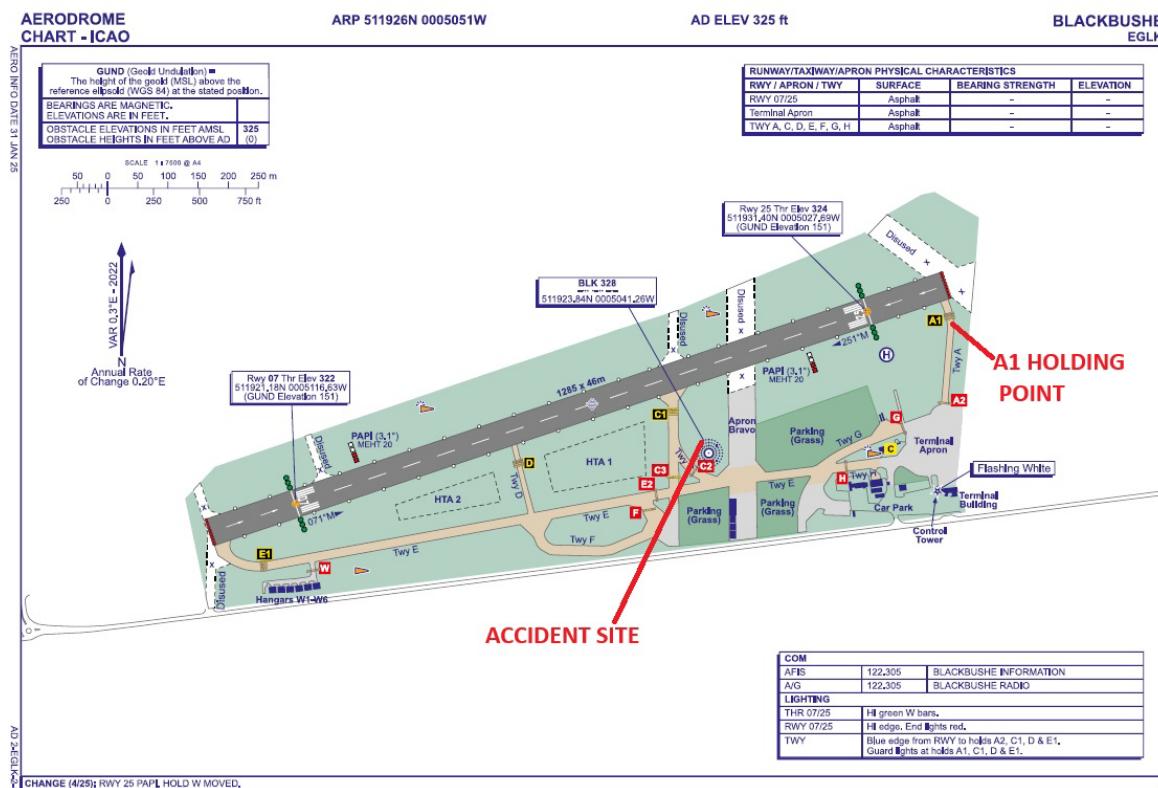
## Synopsis

The aircraft veered left during the takeoff roll and departed the runway. It collided with an antenna on the grass to the left of the runway and was extensively damaged. The solo student pilot on board sustained serious injuries.

## History of the flight

The student had completed a dual circuit consolidation flight with an instructor immediately preceding the accident flight. This was assessed as satisfactory, and the instructor exited the aircraft on the parking area outside the operator's premises. The intention was then for the student to practice circuits solo.

The student made a radio call to Blackbushe Information and taxied toward Runway 25. The engine run-up checks were conducted with no abnormalities observed. The student taxied to holding point A1 for Runway 25 (Figure 1) and made a "ready for departure" RTF call. Blackbushe Information replied that he was clear for takeoff at his discretion. The student lined up on Runway 25, increased the engine rpm to 4,000, checked that the temperatures and pressures were within limits and then released the brakes. As the aircraft began to accelerate the student recalled applying a right rudder input and advancing the throttle to the maximum continuous power setting. The student then stated, "as airspeed became live, throttle advanced to maximum takeoff power and nearing rotational speed (~55 kt), at this point the aircraft veered left. I attempted to apply additional right rudder, which felt stiffer than usual, I cannot comment on its effectiveness."



**Figure 1**  
Blackbushe Airfield Chart

The aircraft exited the runway to the left onto the adjacent grass. The student recalled reducing the throttle to idle and the aircraft undergoing several "bounces". He applied the brakes but could not recall at what speed or how effective the braking was. As the aircraft travelled across the grass the student saw a large antenna ahead. The student applied right rudder but stated that had no effect. He then applied left rudder which did give a response, but he was unable to avoid the antenna. The right wing struck the antenna and the aircraft rotated around the structure coming to rest after almost 270° of yaw, approximately parallel to Runway 07. The antenna collapsed onto the aircraft shattering the canopy.

Once the aircraft had come to rest the student released his harness and was able to open the canopy. A bystander called out to the student to vacate the aircraft since fuel could be seen leaking out. The student turned off the magnetos, removed the aircraft key, turned off the master switches and then vacated the aircraft over the left wing. His phone detected the crash and initiated an emergency call at 1538 hrs. The student was admitted to hospital and diagnosed with a serious chest injury (manubriosternal dislocation) believed to have resulted from colliding with the aircraft control yoke. He remained in hospital for five days.

## Accident site

The aircraft struck an antenna adjacent to the BLK Non-Directional Beacon (NDB) and came to rest approximately opposite to the intended departure direction (Figure 2).



**Figure 2**  
Overview of accident site

The right wing was severely damaged, the canopy shattered, and the nose landing gear broke off. The extent of the damage is shown in Figure 3.



**Figure 3**  
Aircraft damage

## Aircraft information

The Sonaca 200 is a low-wing cantilever monoplane made from aluminium alloy, it has an enclosed cabin with two side-by-side seats. It is powered by a 115 hp Rotax 914 engine and has a fixed tricycle landing gear. After the accident, the operator examined the aircraft and found all flying controls to be still connected and operating normally. The nosewheel, though its range of movement was limited by the damage, could still be moved in both directions. The wheels, tyres and brakes were all reported to be in good condition.

## Meteorology

The wind at the time of the accident was reported as from 250° at 9 kt. The wind was therefore aligned with the departure runway and so crosswind was not a factor.

## Personnel

The student was very inexperienced with a total of just over 20 flying hours of which less than one hour was as PIC. During the flight with an instructor immediately preceding the accident flight the student flew three circuits. The approaches on those circuits consisted of one go-around, one touch and go landing and one full stop landing with flaps. The instructor stated that the student had '*demonstrated a high level of aircraft control throughout the takeoff, circuit and landing.*' The instructor recalled that the student had a tendency to verbalise their actions, highlighting any required adjustments, throughout each phase of flight. The instructor felt this gave a clear insight into the student's situational awareness and decision-making process.

## Analysis

No technical cause for the aircraft exiting the runway was identified. It is likely therefore that the yaw to the left was induced by the aerodynamic and mechanical characteristics of the aircraft. All propeller aircraft exhibit a tendency to swing to one side on takeoff resulting from the slipstream effect of the propeller and the torque reaction to the propeller's rotation.

A propeller that is rotating in a clockwise direction viewed from behind, as on the Sonaca 200, will impart a rotation to the slipstream in the same sense. This rotation produces an asymmetric flow over the fin and rudder such as to induce an aerodynamic force to the right. This, in turn, will cause the aircraft to yaw to the left.

If the propeller rotates clockwise, viewed from behind, the torque reaction will tend to rotate the aircraft in the opposite sense, ie roll to the left. The rolling motion is prevented by the wheels being in contact with the ground and this results in more weight being supported by the left tyre than the right tyre, which increases the rolling resistance of the left tyre. Consequently, the aircraft will tend to swing to the left until the wings take the weight off the main tyres.

Although the student stated he applied right rudder at the start of the takeoff roll, it appeared that the rudder input did not fully counter the tendency of the aircraft to yaw left. The aircraft was light and would have accelerated rapidly meaning the time interval for the aircraft to

reach the edge of the runway would have been very short. At this point, the student's expectations were breached and it is possible he suffered a startle effect, which might have delayed or impaired the application of appropriate corrective action. With the aircraft travelling at high speed, it is likely it collided with the antenna before the student could respond appropriately.

### **Conclusion**

The aircraft yawed left and exited the runway, most likely as a result of uncorrected slipstream and torque effects. It is possible that the student suffered a startle response which affected his response to the situation. The available evidence suggested insufficient right rudder was applied. The aircraft was damaged beyond economic repair, and the student suffered a serious chest injury.

## Serious Incident

<b>Aircraft Type and Registration:</b>	Siai Marchetti S.205 22/R (Modified), G-VELA	
<b>No &amp; Type of Engines:</b>	1 Lycoming IO-540-D4A5 piston engine	
<b>Year of Manufacture:</b>	1968 (Serial no: 4-149)	
<b>Date &amp; Time (UTC):</b>	27 April 2025 at 1252 hrs	
<b>Location:</b>	Norwich Airport, Norfolk	
<b>Type of Flight:</b>	Private	
<b>Persons on Board:</b>	Crew - 1	Passengers - 1
<b>Injuries:</b>	Crew - None	Passengers - None
<b>Nature of Damage:</b>	Damage to aircraft underside, propeller and landing gear	
<b>Commander's Licence:</b>	Private Pilot's Licence	
<b>Commander's Age:</b>	34 years	
<b>Commander's Flying Experience:</b>	97 hours (of which 8 were on type) Last 90 days – 10 hours Last 28 days – 6 hours	
<b>Information Source:</b>	Aircraft Accident Report Form submitted by the pilot and further enquiries made by the AAIB	

## Synopsis

As the aircraft was on approach to Knettishall Airfield the landing gear failed to extend. Both the normal and emergency extension and retraction systems had malfunctioned. After discussion with his passenger, the pilot decided that it was prudent to divert to Norwich Airport with its higher level of emergency facilities. He carried out a fly past and the control tower staff at Norwich observed that the landing gear appeared not to have extended correctly. The pilot landed the aircraft in this condition and the aircraft sustained damage to its underside and propeller. The pilot and his passenger were uninjured.

The landing gear malfunction was caused by a steering centring pin which had become worn, misaligned and disengaged from its guide bars. The nosewheel did not centre as a result, and this caused the nose gear to jam on retraction into the nosewheel bay. This led to an overload of the normal landing gear extension and retraction system motor and emergency system seizure.

## History of the flight

The pilot had flown a cross-country pleasure flight with a passenger from Knettishall Airfield, Suffolk to Turweston Aerodrome, Buckinghamshire. The flight and the landing at Turweston were uneventful. After a short stay and refuel at Turweston, the pilot took off for the return flight to Knettishall. As the aircraft climbed away from the airfield, the pilot retracted the landing gear. Shortly after he had confirmed the gear was up, he and his passenger, who

was also a PPL holder, detected an electrical burning smell in the cockpit. This subsided in a matter of seconds. They had a short discussion about it and, in the absence of any adverse indications, decided to continue with the flight.

The remainder of the flight was uneventful and as they neared Knottishall the pilot started to configure the aircraft for landing. When he selected the landing gear down there was no response and this was confirmed by the absence of gear down indicator lights. He recycled the landing gear and again there was no movement indication. He attempted this for a second time with no result. At this point he decided to maintain height and turn away from the airfield and manually lower the landing gear. Before doing so he ensured the landing gear was selected down and pulled the circuit breaker to open. He then wound the manual crank handle to lower the landing gear. He was aware the handle requires 29 rotations to fully lower the landing gear but after 10 or 11 turns the handle jammed and would not move. The pilot was now unclear as to the landing gear position and was also concerned that additional attempts would cause system damage and more of a problem. After further discussion with his passenger, the pilot decided that it was prudent to divert to Norwich Airport with its higher level of emergency facilities. He declared a PAN and flew to Norwich. In addition, while in transit, he made an assessment, as far as possible, of the aircraft electrical system in case the landing gear problem was caused by an electrical power generation or distribution malfunction. He requested, and carried out, a low pass at Norwich and observers in the control tower informed the pilot the landing gear appeared to be only partially down (Figure 1).



**Figure 1**

Landing gear partially extended as seen by the observers at Norwich

At the pilot's request, the staff in the tower also called and consulted a flying instructor, who had experience on type, to determine whether anything else could be done to lower the landing gear. It was concluded there were no other possible actions available to the pilot.

The pilot concluded that the safest option was to land at Norwich. The aircraft came to a stop on its underside and after making the aircraft safe, the pilot and his passenger vacated the cockpit. The aircraft sustained damage to the fuselage underside, propeller and landing gear.

### Technical cause

The aircraft was recovered and the landing gear system examined. The nose landing gear assembly was jammed but partially protruding from its bay. It appeared to have been pushed back into its bay on landing. The nosewheel was also off-centre (Figure 2).



**Figure 2**  
Off-centre jammed nosewheel

This was found to have been caused by the steering centring pin, within the steering control quadrant becoming mis-positioned outside its guide bar mechanism so that it did not properly engage in the quadrant, meaning the nosewheel was not centred correctly.

The nose gear appeared to have partially extended in flight on approach to Knettishall. However, the uncentred nosewheel, on retraction after takeoff from Turweston, is suspected to have adversely affected the electrical actuation system linkages and motor. This caused the seizure and overload, which explained the electrical overheating smell of burning.

The nose gear had to be manually forced into the correct position to release it. After its release, the left and right main landing gear legs operated correctly on the ground during the examination. However, they had been hindered in the air by the loss of the actuator and the emergency lowering system being unable to overcome the nose landing gear system restriction.

### Pilot's assessment

The pilot had relatively low hours but described how he used his training to carefully assess the situation, maintain flight in a safe condition and make use of the fact that his passenger was also a qualified pilot, to aid his decision process. He also described how his recent training had focused on the handling of emergency situations. He was of the opinion that this preparation led to a safe outcome.

Having determined the technical cause after the accident, he also was content with his decision not to force the manual lowering system which would have wasted time, potentially caused more damage and may have distracted him from concentrating on safely flying the aircraft.

### Conclusion

Misalignment of the nosewheel centring linkage caused the landing gear extension and retraction system to seize during the takeoff, becoming apparent on approach to the destination airfield.

The pilot's recent training enabled him to remain calm and prioritise maintaining a stable flight path, while he considered available options and attempted to resolve the problem. As the situation developed, and the landing gear configuration remained unclear, he took decisive action to divert to a more suitable airfield. These aspects contributed to the successful outcome.

**Accident**

<b>Aircraft Type and Registration:</b>	Replica Percival Mew Gull, G-HEKL	
<b>No &amp; Type of Engines:</b>	1 De Havilland Gipsy Queen I piston engine	
<b>Year of Manufacture:</b>	2013 (Serial no: PFA 013-14759)	
<b>Date &amp; Time (UTC):</b>	18 April 2025 at 1400 hrs	
<b>Location:</b>	1 mile north-west of Great Massingham Airfield, Norfolk	
<b>Type of Flight:</b>	Private	
<b>Persons on Board:</b>	Crew - 1	Passengers - None
<b>Injuries:</b>	Crew - None	Passengers - N/A
<b>Nature of Damage:</b>	Damage to engine, cowling and landing gear, propeller strike	
<b>Commander's Licence:</b>	Private Pilot's Licence	
<b>Commander's Age:</b>	71 years	
<b>Commander's Flying Experience:</b>	2,681 hours (of which 397 were on type) Last 90 days - 27 hours Last 28 days - 15 hours	
<b>Information Source:</b>	Aircraft Accident Report Form submitted by the pilot plus further enquiries by AAIB	

**Synopsis**

After approximately 30 minutes of flying as part of running-in the engine following a recent rebuild, the engine began to run roughly, and the No 3 cylinder head temperature began to decrease. A short time later the engine suffered an uncontained failure of the No 3 cylinder connecting rod and piston. The pilot was able to conduct a forced landing. The cause of the engine failure was determined to be oil starvation which led to the failure of two main bearings and the No 3 cylinder connecting rod end cap. Debris from the uncontained failure also damaged the magneto and caused the distributor gear drive shaft to shear. The exact cause of the starvation could not be fully determined.

**History of the flight**

The pilot departed Crowland, with the intention of an hour's flight to continue bedding in of the engine which had a recent top end rebuild. He had been flying for approximately 30 minutes, when the engine "missed a few beats", and the pilot decided to return. The engine then started to run roughly and the No 3 cylinder stopped producing power with an associated decrease in cylinder head temperature.

The aircraft was able to maintain cruise rpm and the pilot selected a direct track back to Crowland, whilst considering alternative airfields. When overhead between Sculthorpe and

Great Massingham there was a bang, some smoke, oil covered the screen, and the top of the engine cowl detached on one side and folded back.

The pilot decided to land at Great Massingham Airfield, but the open cowl affected handling to an extent that an off-field landing was required. As the aircraft came to a stop, it tipped onto its nose. The pilot was assisted, unharmed, from the aircraft.

### Accident site

The aircraft came to rest in a field approximately 1 mile north-west of Great Massingham Airfield, sustaining significant structural damage following landing (Figure 1).



**Figure 1**  
G-HEKL post-landing

### Aircraft information

G-HEKL is a replica Percival Mew Gull which had flown 428 hours since completion in 2013 and had a valid Permit to Fly. The aircraft is a single-seat low-wing monoplane of wooden construction with tailwheel undercarriage layout, equipped with a tail skid.

#### *Engine information*

G-HEKL was fitted with a six-cylinder inverted de Havilland Gipsy Queen I engine manufactured in 1936 and had 436 hours running time.

The engine had been stored from new prior to installation in G-HEKL, bar an inspection and partial strip in 1979. At the time of the accident, the engine was being run-in following a top end rebuild and approximately 10 hours of ground running and flying had been completed. New cylinders, overhauled heads, new Gipsy Queen II guides, and new piston rings had been fitted. The front main bearing had been inspected, but none of the remaining main bearings or big end bearings were disturbed. Mineral lubrication oil was being used during the running-in process.

## Engine examination

Following recovery of the aircraft, a full engine strip was performed by the owner.

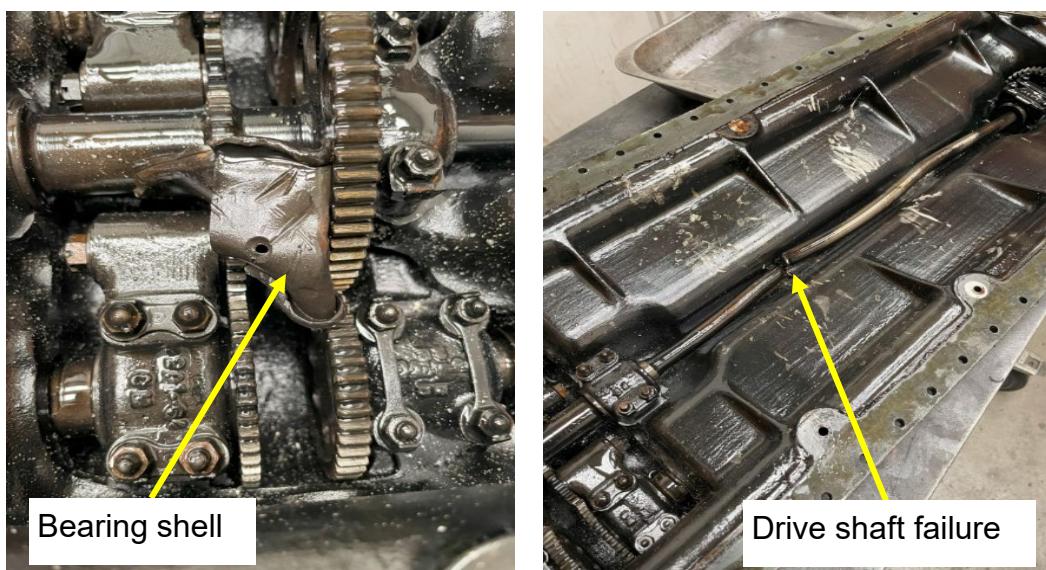
### Crankcase

The engine had a large hole in the right side of the crankcase (Figure 2), and No 3 piston and connecting rod were missing.



**Figure 2**  
Crankcase damage

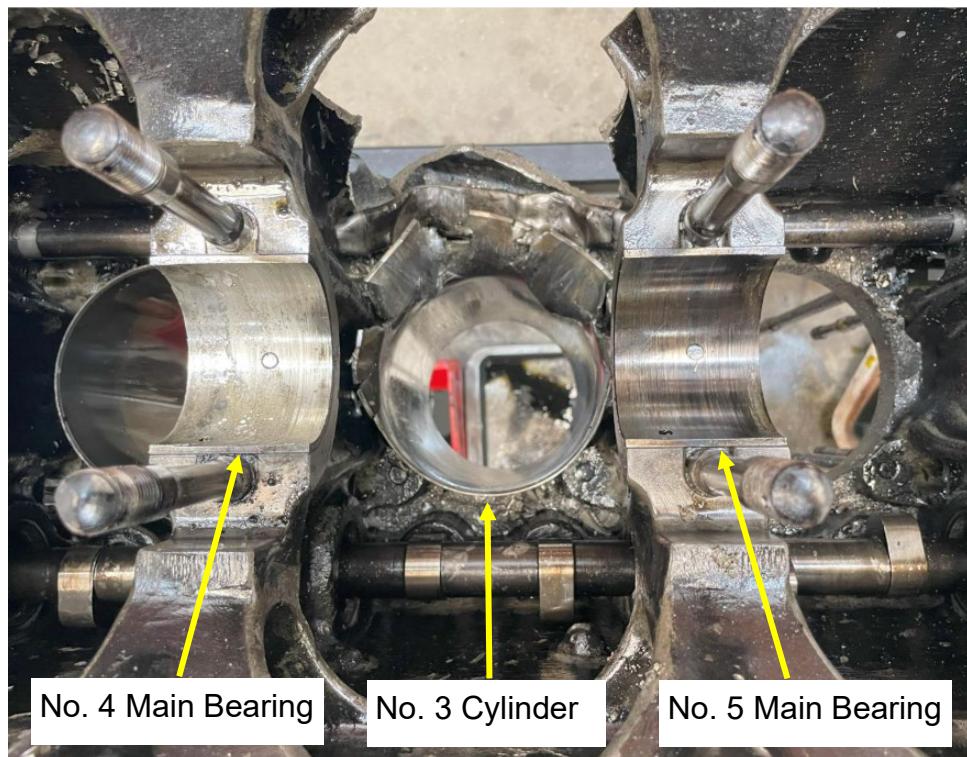
A piece of big end bearing shell was lodged in the magneto and distributor gears, and the attached quill drive shaft had failed in torsion (Figure 3).



**Figure 3**  
Magneto and distributor gears, and drive shaft

### Main bearings and caps

The main bearings are numbered 1-8, from the front to rear of the engine. Nos 1, 3, 4, 6 and 7 showed various stages of surface wear and heat damage, while Nos 2 and 8 were undamaged. No 5 was severely overheated and had suffered a complete loss of its inner surface layer of white metal. The bearing cap was cracked in several places. The bearing cap bolts for Nos 3, 4 and 5 were found to be only finger-tight despite having their split pins and locking tabs in place.



**Figure 4**  
Main bearing, cylinder and crankcase damage

### Big end bearings and caps

The big end bearings are numbered 1-6 from the front to the rear of the engine. Big end bearing No 3 is located between main bearings Nos 4 and 5.

The No 3 big end bearing shells were distorted and crushed from heat. One was located inside the empty No 3 cylinder, the other in the distributor drive gears. Two big end bolts from No 3 connecting rod were found bent, each with their nut and split pin still in place. The crankshaft journal was severely overheated and blackened.

No 4 big end cap and bearing was intact but overheated and the bearing shells had slipped by approximately 60°. Nos 5 and 6 big end bearings showed signs of starting to wear, while Nos 1 and 2 showed no damage.

### *Cylinders*

All cylinders except for No 6 had white metal deposits on the cylinder walls of varying extents, with cylinder Nos 3 and 4 showing the most in the form of a thick band below the upper ring positions. Cylinder Nos 4, 5 and 6 had surface glazing<sup>1</sup>.

No 3 cylinder was significantly damaged from being struck by the piston (Figure 4). None of the cylinder heads showed visible internal damage, but No 3 exhaust tappet was stuck in the open position by particles of white metal.

### *Oil filters*

Very few metallic particles were found across the main oil inlet feed filter, main pressure filter and rear scavenge filter. The front scavenge filter contained no debris.

## **Other information**

### *Cylinder honing*

Surface honing introduces a grooved texture to the cylinder's internal face, which retains lubricating oil. During running-in of the engine, the piston rings mechanically wear against the grooves until a seal is formed. The angle and coarseness of the honing contributes to how the rings move and wear during this process.

Modern cylinders are often honed to a smoother final finish known as 'plateau honing' to reduce the running-in period. To achieve a firm seal between the piston rings and cylinder walls to promote initial wear and reduce the risk of glazing, running-in procedures advise periods of running the engine at high load.

### *Oil feed & redesign*

The main bearings in the Gipsy Queen I are fed from the main oil gallery in the crankcase, with the oil flow direction from rear to front of the engine. From each main bearing, the oil feed enters the crankshaft and divides to lubricate both adjacent big end bearings. Each big end bearing receives its oil from two main bearing oil feeds.

The Gipsy Queen I had a short production run before the Gipsy Queen II was introduced. The Queen II had redesigned crankcase oil feed galleries, and central oil feeds with distribution grooves added to the main bearings. The oil feeds to the big end bearings were also modified. In addition, the crankcase was strengthened and included extra cross-bolts at main bearing No 5.

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### **Footnote**

<sup>1</sup> Glazing occurs when the oil lubrication film on the cylinder walls is heated to form a hard layer, filling the honing grooves. This can occur if the piston rings and cylinder surface become overheated from friction, or if they do not physically wear against each other to form a tight seal during the engine running-in process; allowing combustion gases to further heat the surfaces.

## Survivability

The pilot elected to return to his home airfield whilst considering a precautionary landing. The aircraft's characteristics of minimal forward visibility and a high approach speed required additional consideration; the preferred option of a grass runway for the tailskid, and an airfield with minimal approach hazards were limited.

When faced with a forced landing, the open engine cowl created control difficulties and a high rate of descent. Oil obscured the canopy, further preventing adequate forward visibility. The pilot estimates from the time of engine cessation to landing was approximately 90 seconds. He wore a parachute, although he did not consider it was necessary to abandon the aircraft.

## Analysis

### *Engine failure*

The engine damage suggests disruption to the oil feed began at No 5 main bearing. This led to more substantial oil starvation to Nos 3 and 4 big end bearings due to them each receiving half of their oil downstream from No 5 main bearing. White metal debris, likely from No 3 big end bearing, jammed the exhaust tappet of No 3 cylinder, causing the initial power loss. Subsequent failure of No 3 connecting rod big end cap occurred, with the piston and connecting rod exiting the crankcase. The piece of No 3 big end bearing shell lodged in the distributor drive gears, shearing the distributor gear and magneto drive shaft, stopped the engine.

An exact cause of the oil starvation could not be determined, but lesser damage to main bearings downstream of the oil path to No 5 main bearing suggests its initiation was localised. It is possible that due to higher oil temperatures during the running-in process, low viscosity hot oil was able to pass through the looser Nos 3, 4 and 5 main bearing caps, locally increasing oil consumption. All piston rings and cylinders were replaced, and it is possible that the smoother cylinder honing finish prevented the compression rings to bed in correctly. This could then contribute towards higher cylinder temperatures, oil temperatures, and cylinder glazing.

After a small production run, the Queen I engine design was updated with the Queen II. The timing and nature of the design changes indicates there had been known existing in-service lubrication issues with the Queen I, suggesting it would have had little resilience to any disruption or reduction of oil feed.

The pilot decided to return to his home airfield with a partial power loss due to limited suitable landing locations nearby for the aircraft. However, the subsequent engine failure and unexpected handling characteristics from the open engine cowl resulted in little time for the pilot to execute a forced landing at high speed with limited visibility. As a result of safety recommendations following previous partial power loss accidents<sup>2</sup>, the

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### Footnote

2 Safety Recommendations G-BBSA <https://www.caa.co.uk/safety-initiatives/safer/safer-recommendation-management/accident-g-bbsa/>.

UK Civil Aviation Authority have introduced changes to the PPL (A) training and class and type rating revalidation<sup>3</sup> to cover scenarios of partial power loss and decision-making, effective 1 October 2025.

### Conclusion

The engine stopped due to the magneto and distributor drive shaft breaking, following failure of the No 3 connecting rod big end cap due to oil starvation. The exact cause of oil starvation could not be determined. Subsequent designs of the engine type amended the oil feed paths and strength of No 5 main bearing.

Partial power loss scenarios have been recently added to UK PPL (A) initial training and revalidation syllabi to assist pilots with decision-making ahead of a potential complete power loss.

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### Footnote

<sup>3</sup> Civil Aviation Authority (CAA) UK Aircrew Regulation, UK Regulation (EU) no. 1178/2011, Third edition, Amendment 1, August 2025. “GM2 FCL.740.A Revalidation of class and type ratings – aeroplanes” <https://regulatorylibrary.caa.co.uk/1178-2011-pdf/PDF.pdf> [accessed January 2026]

## Accident

<b>Aircraft Type and Registration:</b>	Robinson R66, G-WBRN	
<b>No &amp; Type of Engines:</b>	1 Rolls-Royce 250-C300/A1 turboshaft engine	
<b>Year of Manufacture:</b>	2023 (Serial no: 1223)	
<b>Date &amp; Time (UTC):</b>	11 June 2025 at 0714 hrs	
<b>Location:</b>	Chalfont St Peter, Buckinghamshire	
<b>Type of Flight:</b>	Private	
<b>Persons on Board:</b>	Crew - 1	Passengers - None
<b>Injuries:</b>	Crew - None	Passengers - N/A
<b>Nature of Damage:</b>	Significant damage to empennage and rotor blade	
<b>Commander's Licence:</b>	Private Pilot's Licence	
<b>Commander's Age:</b>	64 years	
<b>Commander's Flying Experience:</b>	1,020 hours (of which 380 were on type) Last 90 days - 33 hours Last 28 days - 16 hours	
<b>Information Source:</b>	Aircraft Accident Report Form submitted by the pilot	

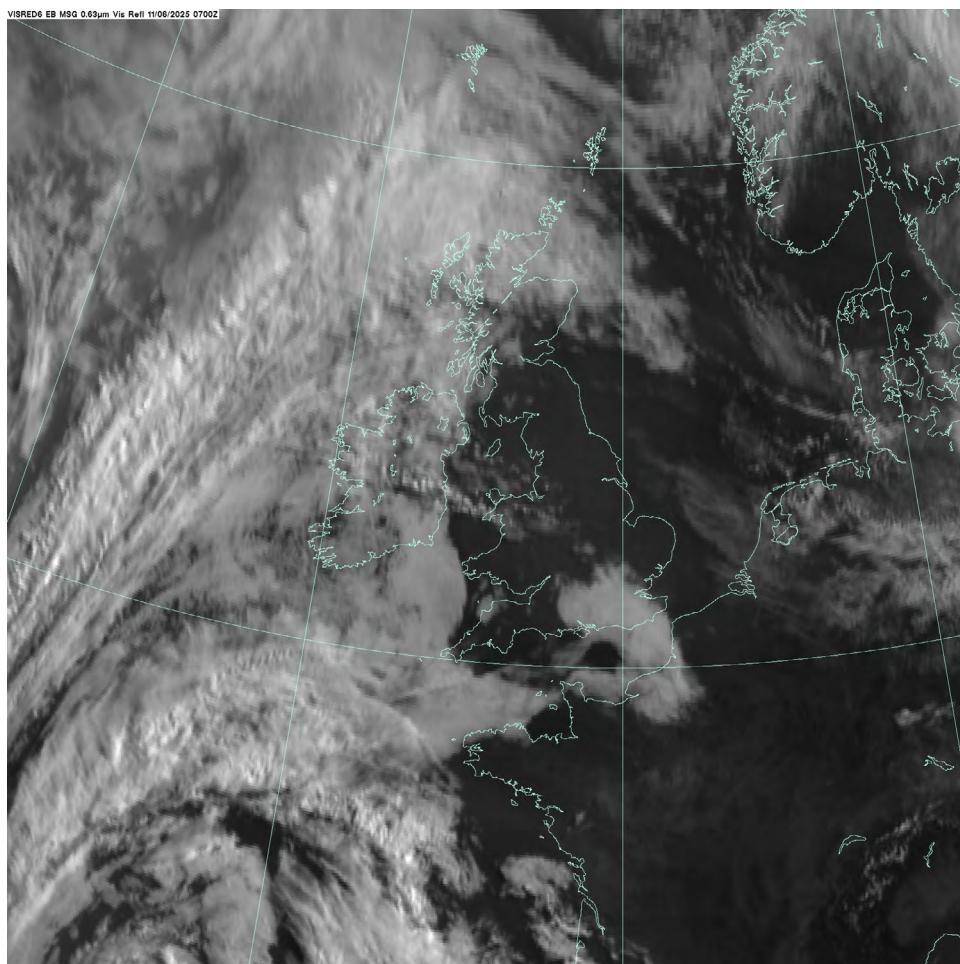
## Synopsis

During a planned VFR flight from Denham Airfield, the pilot of a Robinson R66 encountered low cloud shortly after departure. The pilot was not qualified in instrument flying and unintentionally entered IMC around 700 ft agl, leading to spatial disorientation. Attempts to regain VFR conditions by climbing were constrained by controlled airspace. With thickening cloud and a lowering cloud base, the pilot decided to return to Denham. The helicopter broke cloud over fields and the pilot decided to make a precautionary landing. The landing was heavy, resulting in the helicopter rolling over. The pilot was uninjured, but the helicopter was significantly damaged. A section of blade tip was propelled nearly 180 m, embedding itself in a wisteria attached to the wall of a house.

## History of the flight

The pilot owner of a Robinson R66 planned for a regular flight from Denham Airfield, Buckinghamshire, to a private airstrip near Wellesbourne, Warwickshire. The helicopter was refuelled the night before and was positioned out of the hangar ready for an early morning departure.

The weather in the UK was settled, with an area of high pressure covering the country giving good visibility and a light south-easterly wind. In the morning this gave rise to extensive low cloud in the south (Figure 1). This was forecast to gradually lift during the morning and break by midday.



**Figure 1**  
Visible satellite imagery valid 0700 hrs 11 June 2025

The pilot checked the weather forecast for the route, including airfields enroute, and noted it was marginal for an early morning departure. On arrival at the airfield the pilot conducted a ground observation and noted the cloud base looked better than forecast. He decided not to delay, leaving as planned at 0700 hrs.

The helicopter departed Runway 06 turning left over some lakes and routed north toward one of the visual reporting points for the airfield. The cloud base was not as imagined when viewed from the ground. The pilot was being pushed lower to try and maintain VMC, and he soon found himself intermittently entering cloud at around 700 ft agl with fleeting glimpses of the ground. He was starting to become disorientated and was surprised to find himself now on a westerly heading.

At 900 ft agl and now IMC the pilot reported initiating a climb to see if he could get VFR on top of the cloud, but he was conscious that he was constrained by the base of the London TMA. He entered a climbing left turn, but after climbing an additional 300 ft the cloud was getting thicker and so he decided to descend and turn south to go back to Denham. The pilot was disorientated and increasingly anxious with the developing situation.

The helicopter was now in a descending left turn with an increasing rate of descent (Figure 2). The pilot had intermittent sight of the ground, broke cloud at a low height, and arrived in a “disorganised state” over some fields next to a paddock with outbuildings. He decided to make a precautionary landing.

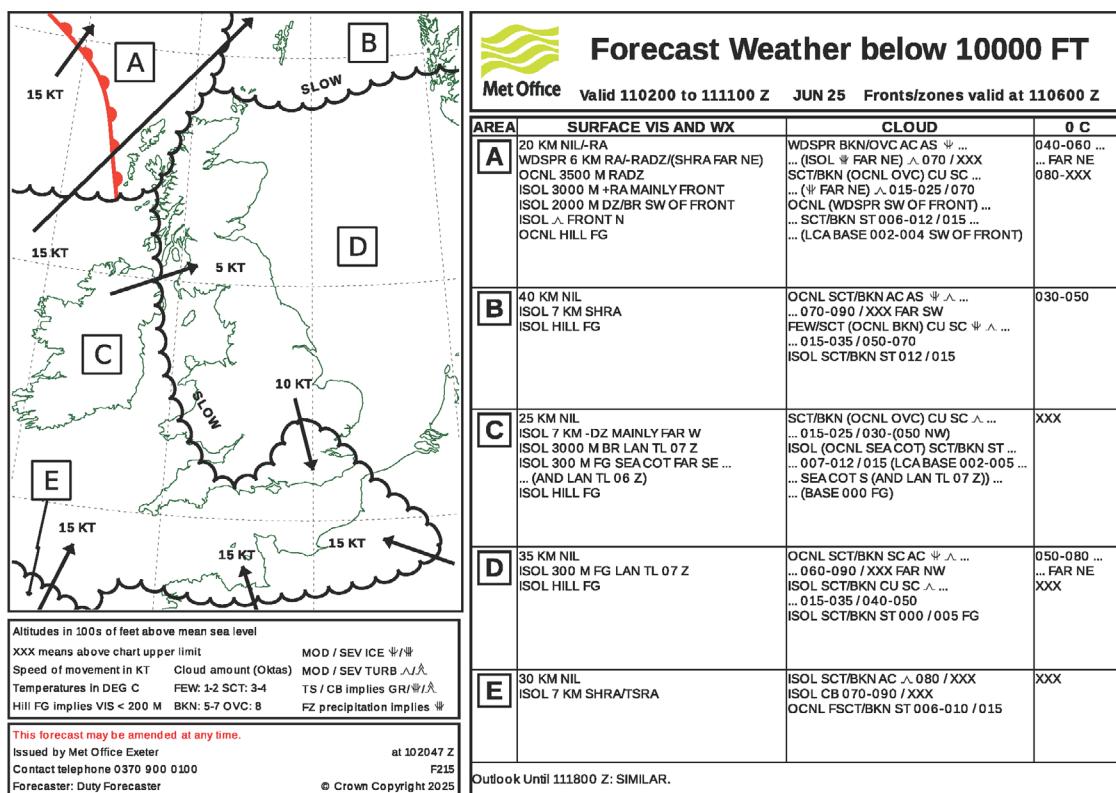


**Figure 2**  
ADS-B flightpath data from FlightAware

The helicopter rolled over on landing. The pilot was uninjured in the accident, shutting off the fuel and electrics before exiting the helicopter. Total flight time was just under five minutes.

### Meteorology

The flight was planned to be conducted within Area C and D of the Metform 215 (F215) Low Level Significant Weather Chart (Figure 3). The F215 chart covers a wide area and conveys the most likely meteorological conditions for the period. Guidance states that it is good practice to consult with observations along the route to obtain the fullest picture.

**Figure 3**

F215 Low Level Significant Weather Chart valid 0200 to 1100 hrs on 11 June 2025

The high pressure system sitting over the UK was giving rise to areas of low cloud around the departure airfield which was due to lift and break. At the time of departure London Heathrow Airport (Heathrow), which is 10 nm from Denham, was reporting conditions as overcast cloud between 400 and 500 ft agl. RAF Northolt, only 3.5 nm from Denham, was reporting broken cloud between 500 and 800 ft agl.

The CAA publishes practical guidance to general aviation pilots in the Skyway Code<sup>1</sup>. Under the section '*Pre-flight Preparation*', it states:

*'VFR flight with a cloud ceiling of 1,500 ft or less above ground level (AGL) requires particular attention to terrain and obstacles. Flight below 1,000 ft AGL is normally only suitable for circuits around the aerodrome or local flying in areas you are familiar with.'*

Consideration must also be given to the low flying rules by not flying closer than 500 ft to any person, vessel, vehicle or structure once the takeoff is completed.

#### Footnote

<sup>1</sup> CAA. *The Skyway Code*, Version 4 (November 2023). Available at <https://www.caa.co.uk/general-aviation/safety-topics/the-skyway-code/> [accessed December 2025].

## VFR flight into IMC

When a pilot unqualified in instrument flying unintentionally enters IMC when on a VFR flight, spatial disorientation may occur. The pilot is unable to correctly interpret the aircraft's attitude, altitude or speed. Control inputs may be made based on false perception, leading to a loss of control.

Research into spatial disorientation for pilots that are not instrument qualified, showed that loss of control will likely occur between 60 seconds and 178 seconds on average after losing visual references.<sup>2</sup> An analysis of helicopter accidents and incidents in the UK between 2000-2010 showed that 68% of inadvertent VFR flight into IMC resulted in a fatal accident.<sup>3</sup>

The CAA has published guidance for general aviation pilots in their Safety Sense Leaflet 33 - 'VFR Flight into IMC'<sup>4</sup> on how to avoid and respond to such a scenario. It states:

*'If the weather is closing in all around, consider a precautionary landing in a field – it may seem like an extreme option that could result in damage to the aircraft, however this is preferable to experiencing a loss of control accident, which is normally fatal.'*

### Precautionary landing

The pilot emerged from the base of the cloud and regained sufficient visual references to make a precautionary landing. The area immediately in front was a paddock with horses and so the pilot manoeuvred to an adjacent field. This field was overgrown, uneven and with a marked slope.

The landing was firm and the helicopter rolled over. The main rotor blade struck the ground, and a 70 cm section of blade tip was propelled nearly 180 m over a main road and a petrol station canopy before embedding itself in a wisteria attached to the wall of a house (Figure 4).

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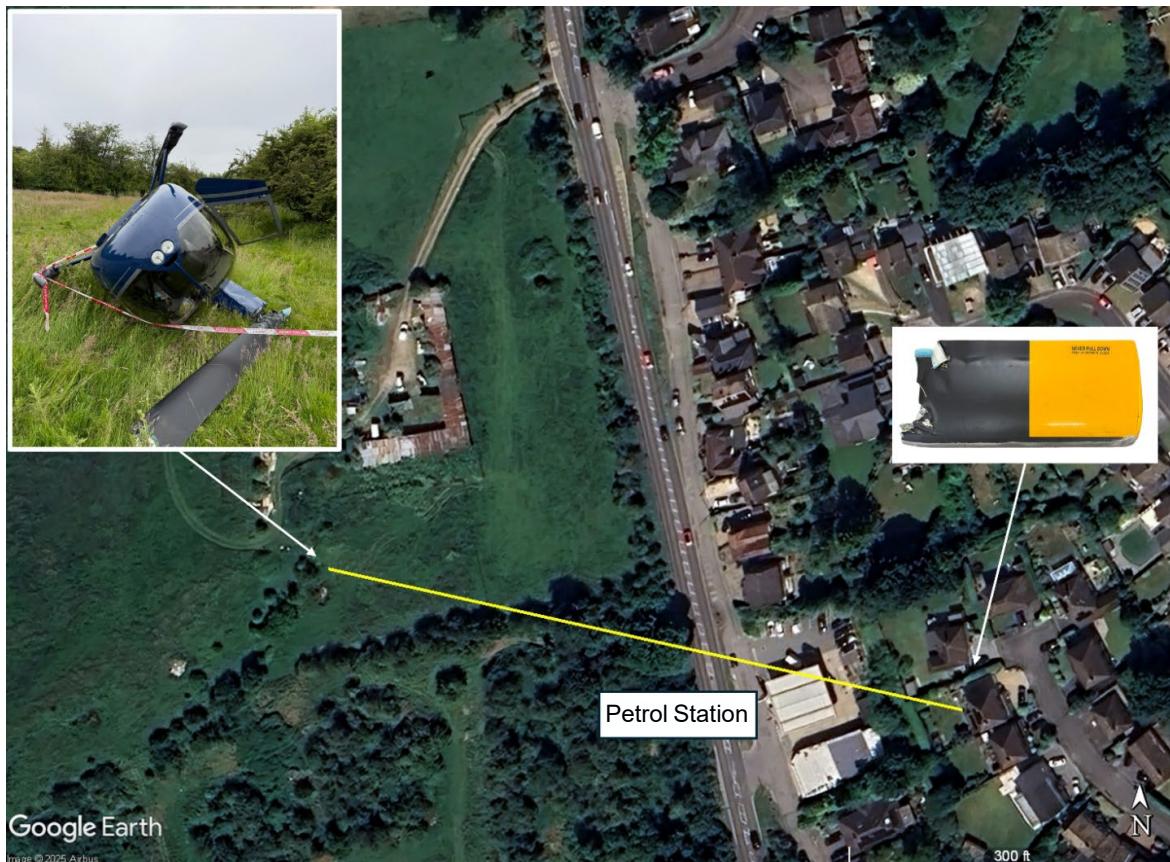
#### Footnote

<sup>2</sup> ATSB. *VFR into IMC and loss of control involving Wittman Tailwind, VH-TWQ*, 2 March 2021, p. 13. Available at <https://www.atsb.gov.au/sites/default/files/media/5779485/ao-2020-004-final.pdf> [accessed December 2025].

<sup>3</sup> NATS. *Helicopter precautionary landings in deteriorating weather conditions*, 16 January 2020. Available at <https://www.aurora.nats.co.uk/htmlAIP/Publications/2020-01-16/html/eAIC/EG-eAIC-2020-003-P-en-GB.html> [accessed December 2025].

<sup>4</sup> Available at <https://www.caa.co.uk/media/v43pcnok/safety-sense-leaflet-33.pdf> [accessed December 2025].

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**Figure 4**  
Trajectory of detached blade tip

## Analysis

### *Meteorology*

The pilot believed from his ground observation that conditions had improved. A check of actual observations from aerodromes in the locality would indicate this was not the case, with both Heathrow Airport and RAF Northolt reporting extensive low cloud.

Denham Airfield is at an elevation of 215 ft amsl, which is higher than Northolt (126 ft amsl) and Heathrow (83 ft amsl). Northolt was reporting broken cloud between 500 and 800 ft agl, indicating that the cloud base in the locality of Denham was likely to be between 400 and 700 ft agl.

Given the built-up area and terrain elevation around Denham, the weather conditions in the locality were not compatible with the requirements of VFR flight, as set out in the Skyway Code.

### *Spatial disorientation*

Spatial disorientation can lead to a loss of control in as little as one to three minutes, and accidents following a loss of control are often fatal. The pilot recognised he was disorientated and felt increasingly anxious at his worsening situation. His decision to make a precautionary landing was in accordance with CAA guidance.

### *Landing*

Having experienced the stress of inadvertent VFR flight into IMC, the pilot regained sufficient visual references with the ground for a precautionary landing. He states that he arrived in a "disorganised state" and made a rushed assessment of the landing area. The chosen field was overgrown, uneven and with a slope.

The landing was heavy. The skids were splayed and flattened, and the cross tubes that run laterally under the fuselage were fractured with the clamps deformed. The left skid that contacted the downward part of the slope collapsed, acting as a pivot point for dynamic rollover<sup>5</sup> to occur.

The main rotor blade struck the ground with high energy, sufficient to propel a section of blade tip weighing 4.5 kg nearly 180 m. There was no damage caused to the house.

### **Conclusion**

The weather in the locality of Denham airfield was unsuitable for a planned VFR flight. Soon after departure the pilot entered IMC and suffered spatial disorientation. Faced with a deteriorating weather situation, the pilot decided to return to Denham. The helicopter broke cloud close to the ground and the pilot made a rushed precautionary landing into a field that was overgrown and with a slope. The landing was heavy, and the helicopter suffered dynamic rollover.

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### **Footnote**

<sup>5</sup> Safety Sense Leaflet 17 - 'Helicopter Airmanship', p. 10-11, published by the CAA. Available at <https://www.caa.co.uk/media/d1vfkpga/safety-sense-leaflet-17v2.pdf> [accessed December 2025].

## Accident

<b>Aircraft Type and Registration:</b>	LAK-17B FES Mini, G-CLTX	
<b>No &amp; Type of Engines:</b>	1 Sportine Aviacija FES-LAK-M100 electric motor	
<b>Year of Manufacture:</b>	2017 (Serial no: 004)	
<b>Date &amp; Time (UTC):</b>	16 August 2025 at 1309 hrs	
<b>Location:</b>	South Wales Gliding Club, Monmouthshire	
<b>Type of Flight:</b>	Private	
<b>Persons on Board:</b>	Crew - 1	Passengers - None
<b>Injuries:</b>	Crew - 1 (Serious)	Passengers - N/A
<b>Nature of Damage:</b>	Damage to fuselage, wings and tail	
<b>Commander's Licence:</b>	Light Aircraft Pilot's Licence	
<b>Commander's Age:</b>	80 years	
<b>Commander's Flying Experience:</b>	2,050 hours (of which 312 were on type) Last 90 days - 26 hours Last 28 days - 10 hours	
<b>Information Source:</b>	Aircraft Accident Report Form submitted by the pilot and enquiries made by the AAIB	

## Synopsis

During a winch launch there was an uncommanded deployment of the glider's airbrakes. This was not noticed by the pilot, but the aircraft's sink rate and low airspeed caused him to immediately attempt a landing. His options were limited, the aircraft was too low to avoid a row of trees ahead and risked a stall if the pilot had pitched up to clear them. The aircraft hit the tree tops and was brought to a stop. He was injured in the process and the glider sustained damage. The accident was caused by the airbrake handle becoming unlocked during a minor technical corrective action in the cockpit earlier in the day. The unsafe condition of the handle was not noticed by the pilot. The handle moved rearwards during the winch launch and the airbrakes deployed as a result.

## History of the flight

During a glider winch launch there was an uncommanded deployment of the airbrakes which was not immediately noticed by the pilot. At the top of the climb, he released the cable and commenced his post launch checks. Whilst he was doing this his attention was drawn to the variometer which was showing an excessive sink rate. He also noticed a lower-than-normal airspeed. At the same time a radio call warning of the airbrake position was made from the ground, but this was not heard by the pilot. Realising something was wrong, he attempted to increase his airspeed by lowering the nose, but this had little effect and the pilot decided to return to the airfield.

The aircraft height had reduced significantly and his options on the ground were now limited. The aircraft was now too low to avoid a row of trees nearby which were in line with his attempted base leg to land downwind. The glider collided with the tree tops which absorbed the glider's energy. The glider came to a stop lodged in the treetops about 15 ft from the ground. The pilot was injured and the glider sustained damage to the fuselage, tail and wings.

### **Pilot's analysis**

The pilot described a sequence of events which he considered to have led to the accident. Prior to the accident flight the glider was being prepared for a winch launch. The inexperienced individual attaching the cable was having some difficulty in properly engaging the launch cable ring in the hook. As the winch tensioned the cable ring 'flicked' vigorously out of the hook. In case the glider had sustained damage to its underside near the hook, the glider was moved from the queue for examination. This found that the hook control cable had derailed from its guide pulley. The pilot gained access to the pulley and cable in the cockpit and with some difficulty, was able to rerail the cable.

The glider was then again prepared for a winch launch with the pilot and ground assistant taking time to ensure the cable and hook functioned and was attached correctly. The launch then went ahead. During the winch launch at about 600 ft agl the airbrakes deployed. He concluded that it had probably become unlocked during the release cable rerailing activity and that the pitch angle during the launch caused the unrestrained handle to move rearwards deploying the airbrakes. In hindsight the pilot realises that he had focussed on the cable and hook activity and had not checked that the airbrake lever was locked after the cable rerailing or during the pre-flight check.

## Serious Incident

<b>Aircraft Type and Registration:</b>	Velos V3	
<b>No &amp; Type of Engines:</b>	2 Velos Rotors 6145N2 Brushless Motors	
<b>Year of Manufacture:</b>	2024 (Serial no: GBR-OP-C2Q99JT6BCAX)	
<b>Date &amp; Time (UTC):</b>	17 March 2025 at 1709 hrs	
<b>Location:</b>	Onllwyn, Neath Port Talbot	
<b>Type of Flight:</b>	Training	
<b>Persons on Board:</b>	Crew - None	Passengers - None
<b>Injuries:</b>	Crew - None	Passengers - N/A
<b>Nature of Damage:</b>	Aircraft destroyed due to post-impact fire	
<b>Commander's Licence:</b>	Other	
<b>Commander's Age:</b>	44 years	
<b>Commander's Flying Experience:</b>	149 hours (of which 40 were on type) Last 90 days - 24 hours Last 28 days - 23 hours	
<b>Information Source:</b>	Aircraft Accident Report Form submitted by the pilot and further enquiries	

## Synopsis

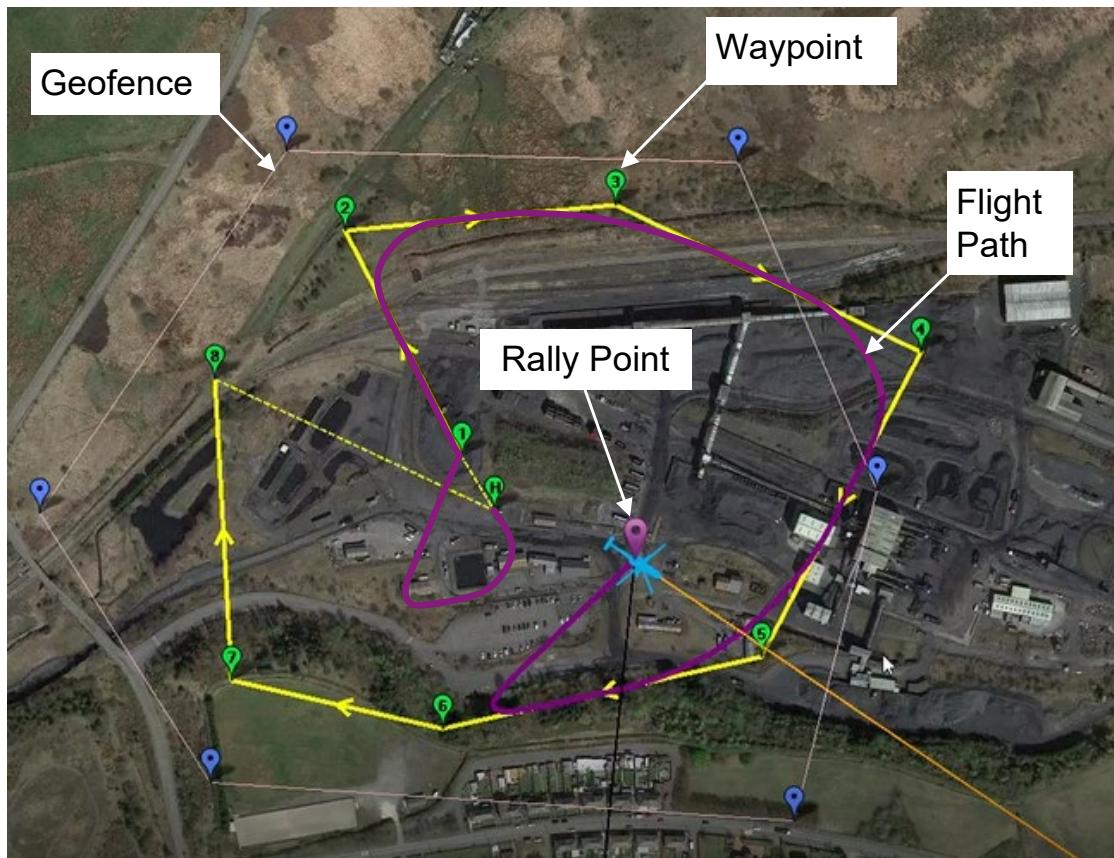
During a first flight after fitting an ADS-B Mode S transponder, the UA experienced a series of erroneous flight channel inputs and fell to the ground. It is likely that an ADS-B transponder fitted to the UA contributed to a level of interference. The Civil Aviation Authority's Operational Authorisation process did not fully assess the usage of the transponder in this instance. The operator has changed the configuration of the UAS for future flights with a lower-power Electronic Conspicuity (EC) device, and the regulator is in the process of updating their Operational Authorisation (OA) and UAS risk assessment for operations in the Specific Category regarding use of EC devices.

## History of the flight

The mission for the flight was planned with eight waypoints, overlaid with a geofence that intersected between waypoints 4 and 5. The aim of the mission was to test the UA's response to breaching the geofence and was the first flight with a new ADS-B Mode S transponder fitted.

The UA took off and flew to waypoints 1 and 2. Between waypoints 2 and 3, there were two RADIO FAILSAFE errors, which cleared automatically, and the flight continued. The UA proceeded to waypoints 3, 4 and 5, breaching the geofence (Figure 1).

Shortly before reaching waypoint 6, another RADIO FAILSAFE error was displayed and cleared. The flight mode changed to RTL and the UA headed towards the pre-programmed 'Rally Point'.

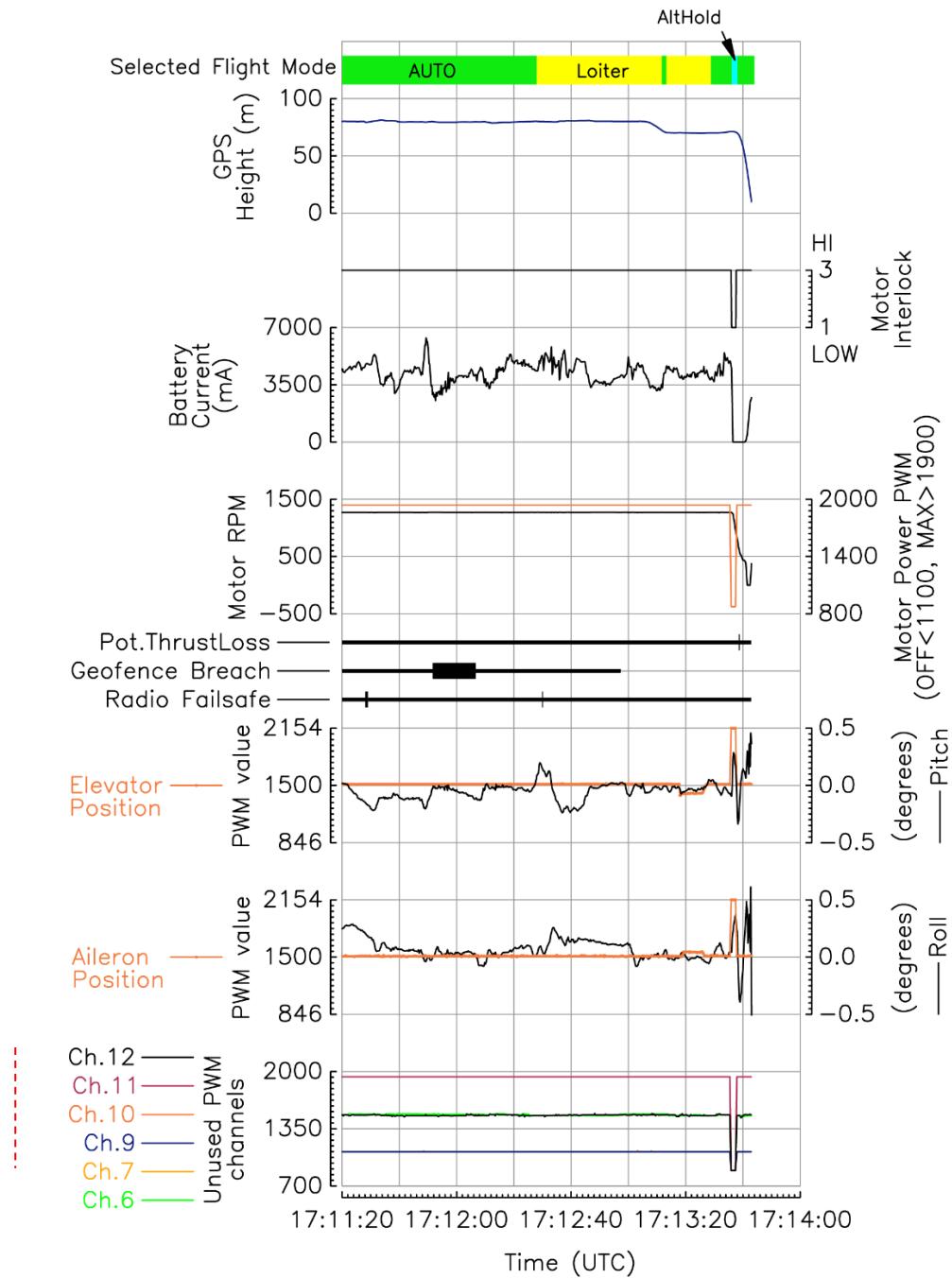


**Figure 1**  
Mission flight overview

When at the Rally Point, the UA entered a planned landing sequence. This was acknowledged by the pilot, who changed the flight mode to AUTO, in order to resume flying via the remaining waypoints. Following this in quick succession, there was an uncommanded flight mode change to ALT HOLD, and the following errors displayed on the Control Unit (CU): MODE CHANGE TO AUTO FAILED, RUNUP NOT COMPLETE, POTENTIAL THRUST LOSS (1) and ERROR VELOCITY VARIANCE. There was a further uncommanded flight mode change to AUTO and the aircraft dropped to the ground. A subsequent battery fire destroyed the aircraft.

## Recorded information

Flight and control data from the accident flight was recovered from the CU, and is summarised in Figure 2.



**Figure 2**  
UAS accident flight data

The Motor Interlock remained at 'high' throughout the flight and the flight modes changed in line with expected pilot and autopilot commands (the second radio failsafe event triggered a change from AUTO to LOITER by the autopilot, displayed as RTL on the CU).

At 17:13:37 hrs the flight mode was changed from AUTO to ALT HOLD without input from the pilot. At the same time, Motor Interlock switched to LOW with an associated drop in Motor Power and the Motor RPM decayed. Battery current was briefly recorded as zero. 10 out of 12 data channels recorded values outside of the range that can be specified by the CU, including several channels not in use (Table 1). Channels 3 (collective) and 4 (yaw) were not affected.

Channel	Command	Value Before Accident	Value During Accident	Operating Range
CH1	Aileron	1511	2154	1000-2000
CH2	Elevator	1515	2154	1000-2000
CH3	Collective	1513	1517	1100-1900
CH4	Yaw (tail rotor)	1525	1521	1100-1900
CH5	Flight Mode	1621	875	1100-1900
CH6	<i>Not in use</i>	1506	875	1000-2000
CH7	<i>Not in use</i>	1089	875	1000-2000
CH8	Motor Power	1941	875	1100-1900
CH9	<i>Not in use</i>	1089	875	1000-2000
CH10	<i>Not in use</i>	1941	875	1000-2000
CH11	<i>Not in use</i>	1941	875	1000-2000
CH12	<i>Not in use</i>	1508	875	1000-2000

**Table 1**  
Aircraft channel values

### Aircraft information

The Velos V3 is rotorcraft-style twin-motor UAS with a three-bladed rotor head (Figure 3). It has a maximum control range of up to 50 km and a maximum weight of 25 kg. The primary command and control (C2) link between the UA and the CU is via a 2.3 GHz Internet Protocol (IP) mesh radio network, with a secondary cellular C2 link. Connectivity between the controller and the aircraft is via 868 MHz radio modem. The aircraft was fitted with a 1090 MHz Mode S ADS-B transponder, with a nominal transmission power of 250 W. The transponder was installed in preparation for trialling future Beyond Line of Visual Sight with Visual Mitigation (BVLOS (VM)) operations in airspace where electronic conspicuity was required.



**Figure 3**  
Velos V3 UAS (not accident aircraft)

## Regulatory information

### *Electronic Conspicuity*

Until March 2025, 1090 MHz was the single frequency approved for airborne EC devices in the UK and was the standard used to specify equipment for this UAS. 978 MHz has since been made available specifically for UAS EC applications, but regulation and guidance is not yet available.

Existing CAA guidance for EC devices is primarily contained within CAP1391<sup>1</sup> applicable to UK Annex II aircraft, non-complex European Union Aviation Safety Agency (EASA) aircraft of <5,700 kg MTOM, gliders and balloons within uncontrolled UK airspace. An airborne EC device operating using ADS-B at 1090 MHz in the UK must have a Declaration of Capability and Conformance from the manufacturer. The CAA has published a list of approved devices on their website<sup>2</sup> and this is referred to in CAA documents CAP1391 and CAP3008<sup>3</sup>. The list of devices is correct as of 2018, with no further manufacturer declarations received.

### *UAS Operational Authorisation*

Operation of a UAS in the Specific Category requires an OA issued by the UK CAA. It summarises operator details, UAS technical specifications, flying limitations and conditions.

Use of transponders on UA's is subject to a case-by-case assessment by the CAA as part of issuing the OA. The assessment reviews the safety case, operational need, requirement for air navigational service provider involvement, the transponder type and UAS system integration. Resulting operational conditions from the assessment typically limit the UA to segregated airspace, allowing controlled operation to determine the transponder is appropriate for the requirement and there is no impact to safety. The transponder must also be included on the CAA list of approved devices.

### Footnote

<sup>1</sup> CAA CAP1391 Electronic Conspicuity Devices, February 2021. <https://www.caa.co.uk/our-work/publications/documents/content/cap1391/> [accessed January 2026].

<sup>2</sup> <https://www.caa.co.uk/general-aviation/aircraft-ownership-and-maintenance/electronic-conspicuity-devices/> [accessed January 2026].

<sup>3</sup> CAA CAP3008 UK Guide to BVLOS in the Specific Category, July 2024 [CAP3008: UK Guide to BVLOS in the Specific Category | UK Civil Aviation Authority](https://www.caa.co.uk/general-aviation/aircraft-ownership-and-maintenance/electronic-conspicuity-devices/) [accessed January 2026].

Following assessment, the transponder type information and operational conditions are detailed in Section 4.14 of the OA before the OA is approved and issued.

The UAS accident flight was being operated within the CAA's Specific Category, VLOS operations. The operator held a CAA OA for BVLOS Beyond Visual Line of Sight with Visual Mitigations (BVLOS VM). The transponder technical details were contained within the operator's Operating Safety Case documentation, referenced to from Section 2.4 of the OA, but transponder type information and operating limitations were not included within Section 4.14.

## Tests and research

### *Prior to flight*

On the day of the accident flight the transponder was not transmitting as expected, and further troubleshooting and configuration was completed prior to a series of system tests under VLOS.

These tests highlighted connectivity issues with the primary and secondary C2 links and an on-board video camera. Adjustments by the operator included replacing a broken primary C2 link antenna boom, removing the SIM cards from the secondary C2 link system, moving the transponder position, and identifying and turning off nearby network repeaters that had been identified mounted on a building. The combination of these actions appeared to resolve the issues.

### *Post-accident*

The manufacturer of the UA tested the aircraft's response and values of the data channels if the radio modem experienced an interruption to transmission. This was achieved by, in turn, removing connection to the radio modem at the CU via power-off, and then to the aircraft via physical disconnection. The results showed the system held the last known values for all channels until connection was restored.

## Analysis

Multiple data channels between the CU and the aircraft were affected at the same time, which exceeded the normal control parameters commanded by the CU. This resulted in the aircraft being unable to sustain flight.

Testing showed that if a loss of connectivity between the radio modem and the flight computer occurred, the last known values would have been held until connectivity was restored. As changes of input value occurred, and the effects were not consistent across all channels, it is likely that the aircraft's systems experienced a level of interference rather than a full loss of connectivity.

The aircraft had not suffered from system communication issues prior to the installation and use of the transponder. In the absence of being able to test the aircraft post-accident, it is likely that this was the source of interference.

The operator's choice of transponder was limited to those available for use on 1090 MHz frequency to satisfy a requirement for a particular location of airspace, and that would effectively integrate with the UA's system architecture. The transponder's specifications including transmission output power were more suited to higher-altitude and higher-speed operations.

The fitting and use of a transponder was detailed within the operator's Operating Safety Case documentation referenced within the OA, but the technical details and operating conditions had not been included in Section 4.14. This indicates that the transponder assessment had not be carried out by the regulator prior to OA approval, missing the opportunity to review the suitability of the transponder for the application, particularly its transmission power.

The operator has taken the following actions for future flight operations:

- The remaining aircraft to be used in the trial will be re-fitted with a different transponder at 20 W output, capable of using either using the 978 or 1090 MHz bands.
- The command-and-control link hardware has been changed to provide a transponder/communications combination with proven capability tested by the equipment manufacturer.

Prior to updated regulation and guidance becoming available for use of EC devices on 978 MHz, which is intended to be the standard for UAS, the regulator will continue to advise individual users of EC devices on UAS on a case-by-case basis. Use of 978 MHz is used for EC elsewhere in the world, and its adoption in the UK will increase choice of EC equipment available to operators.

The regulator is undertaking the following actions:

- Using UK Specific Operations Risk Assessment (UK SORA) framework for Specific Category operations, which has a separate Section for EC devices that will assist in providing an additional check point for transponder assessment.
- Updated wording will be incorporated into Section 4.14 of the OA template for 978 MHz devices, including technical compliance specifications.

## Conclusion

The UA was subject to interference, which resulted in erroneous inputs to multiple system channels. This left the aircraft unable to sustain flight. It is likely that the interference originated from the UA's transponder, although the source could not be definitively identified.

The Operator's OA was issued without an assessment of the transponder, missing the opportunity to identify that the transponder's technical specifications exceeded that required prior to flight.

## **AAIB Record-Only Investigations**

This section provides details of accidents and incidents which were not subject to a Field or full Correspondence Investigation.

They are wholly, or largely, based on information provided by the aircraft commander at the time of reporting and in some cases additional information from other sources.

The accuracy of the information provided cannot be assured.



**Record-only investigations reviewed: November - December 2025**

**2 May 2025** **CZAW** **G-OCRZ** Popham Aerodrome, Hampshire  
**SportCruiser**

The pilot reported that, while making an approach to land, they experienced an airprox with another aircraft also on approach. This distracted the pilot and contributed to the subsequent landing being hard. There was significant damage to the aircraft including to the propeller and nose landing gear.

**3 May 2025** **Rotorsport UK** **G-KENG** Halesland Airfield, Somerset  
**MT-03**

The student pilot began the takeoff run with a crosswind component of approximately 15 kt, gusting 20 kt from the right. The aircraft's maximum demonstrated takeoff crosswind component is 22 kt. As the aircraft accelerated, it veered to the left and, just after it lifted off, its landing gear caught a wire fence. The aircraft dropped back to ground, rolled down an embankment and struck a tree, causing significant damage to the body, landing gear and rotor. The pilot, who was attempting to fly solo unsupervised by an instructor and having not completed their training, reflected that they did not have the skill to correct the situation or abort the takeoff.

**28 Jul 2025** **Minicab (JB01** **G-MCAB** Barton Ashes Airfield, Hampshire  
**Standard)**

The pilot reported that, while approaching a grass airstrip, he reduced the rate of descent at approximately 30 ft agl. The aircraft dropped to the ground and the impact caused significant damage to the cockpit and wings where they join the fuselage.

**10 Aug 2025** **Guimbal Cabri G2** **G-KARL** Heli Area 1, Oxford Airport

The instructor was demonstrating an autorotation to a student, intending to transition to a power recovery landing. He omitted to verbalise checks during the descent and as a result the engine was not resynchronised. After flaring, there was insufficient rotor rpm available to cushion the landing, and the helicopter landed hard, causing damage to the landing gear and its support structure, and the mast droop stop wear plates.

**26 Sep 2025** **Conway Viper** **G-CKUS** Llanbedr Airfield, Gwynedd

The purpose of this single seat deregulated (SSDR) category flight was to continue testing 'the effect of combined pitch trim using both canard and elevator tab'. The pilot reported anomalies with pitch control after the aircraft became airborne and, knowing the marked nose-down pitch response when extending the landing gear, decided to land with it retracted.

**Record-only investigations reviewed: November - December 2025 cont**

**30 Oct 2025 Mooney M20K G-BYEE Blackbushe Airport, Surrey**  
During a night landing the aircraft floated during the flare, possibly due to changeable wind conditions which resulted in a runway overrun. The pilot stated he flew a steeper than normal approach with extra speed which may have also contributed. In review, the pilot will consider making an earlier decision to go around if an approach becomes unstable.

**6 Nov 2025 CZA Wickenby Airfield, Lincolnshire**  
**Sportcruiser**  
On touchdown the nose landing gear broke and the aircraft came to rest nose-down.

**8 Nov 2025 Piper PA3-0 N8181Y Gloucestershire Airport**  
On a return flight to Ross Strip the pilot lowered the gear but there was no green light. After a go-around and fault finding there was still no indication. A check with a mirror showed that the gear appeared deployed so the pilot diverted at gear limited speeds to Gloucester where there was emergency service cover. After a low visual pass to confirm the gear was down, the aircraft landed normally before the landing gear gave way and the aircraft progressively decelerated stopping a few meters off the edge of the runway.

**16 Nov 2025 Piper PA-28-161 G-BOHO Duxford Airfield, Cambridgeshire**  
The aircraft was on final for Runway 06 with full flaps selected and a low power setting to lose height. At 300 ft the pilot selected low carburetor heat, as per his previous training, and shortly afterwards increased power. The engine rpm did not increase, so the pilot selected high carburetor heat but this did not help. There were trees between the aircraft and the runway and the pilot judged he would not reach the threshold. He turned away from the trees and landed in a field and the aircraft came to rest abruptly. The nose landing gear collapsed and there was damage to the leading edge of the wing and to the propeller.

**17 Nov 2025 CEA DR220 G-BUTH Broadwoodwidger, Devon**  
Near Okehampton, the engine started to run rough and despite carburettor heat the rough running and vibration increased. Unable to maintain altitude the pilot declared a PAN and executed a successful precautionary landing in a field. ATC and the police were informed. The pilot and engineer considered the possibility of taking off from the field. Having moved to the field boundary the pilot completed engine ground runs and attempted take off. As the aircraft progressed it struck soft ground near some trees which resulted in the right wing tip striking a hedge, causing damage to the propeller and main landing gear. The pilot attributed the accident to poor decision making in their part.

**Record-only investigations reviewed: November - December 2025 cont**

**19 Nov 2025 DHC-1 Chipmunk G-CLLI** Ewesley Airfield, Northumberland 22

The aircraft suffered a partial power failure shortly after takeoff at a height of approximately 20 ft. The pilot elected to land immediately straight ahead but on landing the aircraft slid down a hill, striking a fence and came to a halt in an adjacent field.

**26 Nov 2025 Piper PA-28-180 G-AVNW** Farthing Corner Aerodrome, Kent

Following a flight in which the pilot undertook some stall practice and practice forced landings, the pilot opted to land at Runway 06 because the sun was low. On landing, the aircraft bounced and ran off the end of the runway through a barbed wire fence, and came to a halt 15 m into the field.

**6 Dec 2025 Commander 114B G-CMZA** Shacklewell, Hackney

Whilst landing the pilot lost forward vision due to low sun and small cracks on the inside of the windscreen. The aircraft touched down short and to the left of the runway in a field of young oil seed rape. The aircraft struck a fence post resulting in damage to the propeller and left wing. The pilot commented that there was "crazing within the perspex" that was not observable in normal daylight when performing the pre-flight inspection.

**8 Nov 2025 Tecnam P2008-JC G-TSFC** Clipgate Farm Airstrip, Kent

The pilot reported that he touched down approximately one third of the way down Runway 02 at Clipgate Farm Airstrip. The aircraft then bounced, reducing the available landing distance. The runway surface was wet, which contributed to the aircraft's wheels locking and skidding under heavy braking. The aircraft overran the runway, coming to rest in trees beyond the upwind threshold. The pilot reflected that executing a go-around following the bounce would have been a better option.



## **Miscellaneous**

This section contains Addenda, Corrections and a list of the ten most recent Aircraft Accident ('Formal') Reports published by the AAIB.

The complete reports can be downloaded from the AAIB website ([www.aaib.gov.uk](http://www.aaib.gov.uk)).



## **TEN MOST RECENTLY PUBLISHED FORMAL REPORTS ISSUED BY THE AIR ACCIDENTS INVESTIGATION BRANCH**

3/2015 Eurocopter (Deutschland) EC135 T2+, G-SPAO Glasgow City Centre, Scotland on 29 November 2013. Published October 2015.	2/2018 Boeing 737-86J, C-FWGH Belfast International Airport on 21 July 2017. Published November 2018.
1/2016 AS332 L2 Super Puma, G-WNSB on approach to Sumburgh Airport on 23 August 2013. Published March 2016.	1/2020 Piper PA-46-310P Malibu, N264DB 22 nm north-north-west of Guernsey on 21 January 2019. Published March 2020.
2/2016 Saab 2000, G-LGNO approximately 7 nm east of Sumburgh Airport, Shetland on 15 December 2014. Published September 2016.	1/2021 Airbus A321-211, G-POWN London Gatwick Airport on 26 February 2020. Published May 2021.
1/2017 Hawker Hunter T7, G-BXFI near Shoreham Airport on 22 August 2015. Published March 2017.	1/2023 Leonardo AW169, G-VSKP King Power Stadium, Leicester on 27 October 2018. Published September 2023.
1/2018 Sikorsky S-92A, G-WNSR West Franklin wellhead platform, North Sea on 28 December 2016. Published March 2018.	2/2023 Sikorsky S-92A, G-MCGY Derriford Hospital, Plymouth, Devon on 4 March 2022. Published November 2023.

Unabridged versions of all AAIB Formal Reports, published back to and including 1971, are available in full on the AAIB Website

<http://www.aaib.gov.uk>

## GLOSSARY OF ABBREVIATIONS

aal	above airfield level	kt	knot(s)
ACAS	Airborne Collision Avoidance System	lb	pound(s)
ACARS	Automatic Communications And Reporting System	LP	low pressure
ADF	Automatic Direction Finding equipment	LAA	Light Aircraft Association
AFIS(O)	Aerodrome Flight Information Service (Officer)	LDA	Landing Distance Available
agl	above ground level	LPC	Licence Proficiency Check
AIC	Aeronautical Information Circular	m	metre(s)
amsl	above mean sea level	mb	millibar(s)
AOM	Aerodrome Operating Minima	MDA	Minimum Descent Altitude
APU	Auxiliary Power Unit	METAR	a timed aerodrome meteorological report
ASI	airspeed indicator	min	minutes
ATC(C)(O)	Air Traffic Control (Centre)( Officer)	mm	millimetre(s)
ATIS	Automatic Terminal Information Service	mph	miles per hour
ATPL	Airline Transport Pilot's Licence	MTWA	Maximum Total Weight Authorised
BMAA	British Microlight Aircraft Association	N	Newton(s)
BGA	British Gliding Association	N <sub>R</sub>	Main rotor rotation speed (rotorcraft)
BBAC	British Balloon and Airship Club	N <sub>g</sub>	Gas generator rotation speed (rotorcraft)
BHPA	British Hang Gliding & Paragliding Association	N <sub>1</sub>	engine fan or LP compressor speed
CAA	Civil Aviation Authority	NDB	Non-Directional radio Beacon
CAVOK	Ceiling And Visibility OK (for VFR flight)	nm	nautical mile(s)
CAS	calibrated airspeed	NOTAM	Notice to Airmen
cc	cubic centimetres	OAT	Outside Air Temperature
CG	Centre of Gravity	OPC	Operator Proficiency Check
cm	centimetre(s)	PAPI	Precision Approach Path Indicator
CPL	Commercial Pilot's Licence	PF	Pilot Flying
°C,F,M,T	Celsius, Fahrenheit, magnetic, true	PIC	Pilot in Command
CVR	Cockpit Voice Recorder	PM	Pilot Monitoring
DME	Distance Measuring Equipment	POH	Pilot's Operating Handbook
EAS	equivalent airspeed	PPL	Private Pilot's Licence
EASA	European Union Aviation Safety Agency	psi	pounds per square inch
ECAM	Electronic Centralised Aircraft Monitoring	QFE	altimeter pressure setting to indicate height above aerodrome
EGPWS	Enhanced GPWS	QNH	altimeter pressure setting to indicate elevation amsl
EGT	Exhaust Gas Temperature	RA	Resolution Advisory
EICAS	Engine Indication and Crew Alerting System	RFFS	Rescue and Fire Fighting Service
EPR	Engine Pressure Ratio	rpm	revolutions per minute
ETA	Estimated Time of Arrival	RTF	radiotelephony
ETD	Estimated Time of Departure	RVR	Runway Visual Range
FAA	Federal Aviation Administration (USA)	SAR	Search and Rescue
FDR	Flight Data Recorder	SB	Service Bulletin
FIR	Flight Information Region	SSR	Secondary Surveillance Radar
FL	Flight Level	TA	Traffic Advisory
ft	feet	TAF	Terminal Aerodrome Forecast
ft/min	feet per minute	TAS	true airspeed
g	acceleration due to Earth's gravity	TAWS	Terrain Awareness and Warning System
GNSS	Global Navigation Satellite System	TCAS	Traffic Collision Avoidance System
GPS	Global Positioning System	TODA	Takeoff Distance Available
GPWS	Ground Proximity Warning System	UA	Unmanned Aircraft
hrs	hours (clock time as in 1200 hrs)	UAS	Unmanned Aircraft System
HP	high pressure	USG	US gallons
hPa	hectopascal (equivalent unit to mb)	UTC	Co-ordinated Universal Time (GMT)
IAS	indicated airspeed	V	Volt(s)
IFR	Instrument Flight Rules	V <sub>1</sub>	Takeoff decision speed
ILS	Instrument Landing System	V <sub>2</sub>	Takeoff safety speed
IMC	Instrument Meteorological Conditions	V <sub>R</sub>	Rotation speed
IP	Intermediate Pressure	V <sub>REF</sub>	Reference airspeed (approach)
IR	Instrument Rating	V <sub>NE</sub>	Never Exceed airspeed
ISA	International Standard Atmosphere	VASI	Visual Approach Slope Indicator
kg	kilogram(s)	VFR	Visual Flight Rules
KCAS	knots calibrated airspeed	VHF	Very High Frequency
KIAS	knots indicated airspeed	VMC	Visual Meteorological Conditions
KTAS	knots true airspeed	VOR	VHF Omnidirectional radio Range
km	kilometre(s)		

