Accident

Aircraft Type and Registration:	Jodel D120, G-AYGG	
No & Type of Engines:	1 Continental Motors Corp C90-14F piston engine	
Year of Manufacture:	1960 (Serial no: 184)	
Date & Time (UTC):	7 September 2024 at 1215 hrs	
Location:	Belhus Woods Country Park, Essex	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - None
Injuries:	Crew - 1 (Serious)	Passengers - N/A
Nature of Damage:	Aircraft destroyed	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	80 years	
Commander's Flying Experience:	3,702 hours (of which 2,547 were on type) Last 90 days - 34 hours Last 28 days - 7 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot and AAIB examination of the engine	

Synopsis

Shortly after takeoff the pilot declared an emergency due to an engine issue. Whilst possibly attempting to return to the airfield, the aircraft lost control before striking the ground in Belhus Woods Country Park. The pilot was seriously injured.

The cause of the engine issue was not determined; however, this event serves as a reminder that decision making when engine failures occur close to the ground is critical. Pre-departure briefing to plan actions in the event of a failure can help to make positive decisions in the event of an engine failure. Pilots are also reminded of the importance of maintaining speed and control throughout the flight.

History of the flight

The pilot had flown from his home airfield, Farthing Corner, Kent, to Damyns Hall Aerodrome, Essex, earlier that day. A flight of about 16 minutes. The accident occurred during the following flight. The purpose of the flight is not known.

Shortly after departing from Runway 21 the pilot transmitted a MAYDAY call on Damyns Hall Radio reporting an engine issue. The aircraft was then seen to turn towards the airfield before it departed controlled flight. The aircraft struck the ground in a wooded area of a field in Belhus Wood Country Park, approximately 1 km south-east of airfield. The pilot sustained

serious injuries and was taken to hospital. Responders who attended the accident recall a strong smell of fuel on the accident site.

ADS-B data recorded from the flight showed an indicative flight path suggesting that the aircraft climbed to a maximum of 900 ft amsl and was approximately 1.5 km from the airfield flying in an easterly direction before it started to descend and turn to the north. During the final moments of the flight the aircraft entered a tightening left turn to the west before the data ended. This suggests that the aircraft may have entered a spin to the left before it struck the ground.

The aircraft was destroyed in the accident.

The pilot remained in hospital for some time after the accident and does not remember the flight, or the days preceding it.

Aircraft information

The Jodel D120 is a two-seat monoplane of wooden construction powered by a Continental C90-14F engine. G-AYGG had a valid Permit to Fly that was due to expire in March 2025. It was built in 1960 and had been owned by the pilot since 1996. There were no recording devices on the aircraft.

Aircraft examination

The engine was recovered to the AAIB facility in Farnborough, for detailed examination. The hub of the propeller was still attached to the engine. The wooden blades had fractured at approximately 1/3 radius with indications that the blades were stationary or rotating slowly at the time of the accident. The carburettor and air intake filter had been crushed in the accident and were only attached to the engine by the throttle and mixture control lines.

Examination of the engine found no evidence to indicate why the pilot reported an engine issue.

Aerodrome information

Damyns Hall is an unlicensed airfield with a main grass runway orientated 030°/210°, is 650 m long and is 56 ft amsl.

Analysis

Assessment of the engine and propeller by the AAIB identified that the engine had likely stopped at the time of the accident; however, no defect was identified which would have caused the engine to stop. The smell of fuel at the accident site would indicate that the aircraft was carrying fuel but it could not be determined if it was being supplied to the engine at the time of the accident.

Recorded data from the flight shows that after takeoff the aircraft started a climbing turn to the left. At a maximum height of 900 ft amsl the aircraft started to descend and continued the left turn, as the aircraft descended the left turn tightened until control was lost.

The initial descent observed is consistent with a pilot's response to a loss of power by entering a decent at the aircraft's optimum glide speed. The tightening left turn may indicate that the pilot was attempting to return to the airfield from which he departed; however, this cannot be confirmed.

As the engine issue became apparent the pilot was faced with a difficult decision whether to land ahead or to attempt a turn back. Being at a maximum 850 ft aal and on the equivalent of a crosswind leg of the circuit he may have been able to perform a landing on Runway 03 however if the engine had a partial power loss he may have attempted to perform a circuit and land normally.

The CAA have published several documents intended to provide information to assist pilots. Safety Sense Leaflet SS30 - *'Loss of control Stall & Spin Awareness'*[1] provides guidance on stall avoidance and recovery, Safety Sense Leaflet SS12 - *'Strip Flying'*[2] provides information regarding operating from small airstrips and covers considerations for loss of power after takeoff. This advises:

> *'You should **review the options in the event of an engine failure on takeoff.** The obstacle environment may require turning in a particular direction. Have a picture in your head of what the area in front of you will look like in the event of a low level engine failure.*
>
> *Do not consider making a 'turn-back' manoeuvre – it is always safer to aim for a point in front of you or to the side.'*

With the aircraft above 500 ft it would be considered beyond the normal engine failure after takeoff (EFATO) procedures, but the advice to review options in the event of an engine failure is still valid until at a height or position to allow turn back to the airfield are met. If there is any doubt in the ability to return to the airfield, it is safer to conduct a forced landing away from the airfield, however the proximity to the airfield may appear to provide a safe landing site despite the low altitude.

The emergencies section of CAA CAP 1535 The Skyway Code[3] also provides guidance for managing power loss after take-off. It states:

- *'Know your best glide speed and procedures for your aircraft.*
- *Particularly at low level, focus on maintaining speed and control. Provided you keep the aircraft at flying speed and under control, engine failures are unlikely to be fatal.*

Footnote

[1] CAA Safety Sense Leaflet SS30 - SS30 - Loss of control Stall & Spin Awareness available at https://www.caa.co.uk/media/ukogcsea/caa8230_safetysense_30-lossofcontrol_v10.pdf [accessed 19 September 2025].

[2] CAA Safety Sense Leaflet SS12 - Strip Flying available at https://www.caa.co.uk/media/lpwhsrfn/safetysense12-strip-flying.pdf [accessed 19 September 2025].

[3] CAA Skyway Code (CAP1535) available at https://www.caa.co.uk/our-work/publications/documents/content/cap1535/ [accessed 19 September 2025].

- *If a failure happens shortly after take-off, landing ahead is safer than attempting to turn back. Assess the area immediately in front of you and pick the place that is likely to cause the least damage.*
- *Partial engine failures can confuse the decision making process. Assess whether the failure is likely to become worse – for example if rapidly losing oil pressure, the engine may not run for much longer. Take a positive decision to either put down in a field or continue to an aerodrome, depending on your judgement of the problem.'*

The AAIB have investigated many previous accidents which involved a partial or complete power loss leading to a loss of control of the aircraft. During the period 2011 - 2021 the AAIB completed 16 field investigations in which partial loss of power was involved. Arising from those 16 accidents, there were 15 fatalities and 9 serious or life-threatening injuries. In two of these accidents there were no injuries, and both were as a result of flying the aircraft under control to a successful forced landing or ditching.

On 16 June 2022 the AAIB published a report into an accident to G-BBSA, a Grumman AA5, which suffered a partial power loss shortly after takeoff followed by a loss of control[4]. This report made three recommendations to the CAA to include training about partial power loss for new pilots and pilots renewing or revalidating their licence. In October 2025, as part of the Licensing and Training Simplification Project[5] the CAA introduced guidance and approaches to managing partial power loss to the ab initio training syllabus and biannual refresher flight recurrence assessment.

Detail related specifically to Partial Power loss can be found at:

AMC1 FCL.210 PPL(A) Training course - Exercises 12/13 and 16. Ex 6 should also be used to demonstrate flight at different power settings.

AMC1 FCL.740.A(b)(1)(ii) Revalidation of class and type ratings - Partial power loss is now featured in the training flight for the revalidation of the class rating.

GM1 FCL 210 PPL(A) Training course

GM1 FCL.235 Skill Test

Additionally, the CAA has produced a webinar[6] specifically providing guidance for teaching partial power loss scenarios.

With the pilot not being able to recall the flight and with no recording devices on the aircraft able to capture what happened during the event and with no findings from the examination of the aircraft, it is not possible to determine with certainty what occurred in this accident.

Footnote

[4] G-BBSA report available at https://www.gov.uk/aaib-reports/aaib-investigation-to-grumman-aa-5-g-bbsa [accessed 19 September 2025].

[5] CAA Licensing & training simplification https://www.caa.co.uk/general-aviation/pilot-licences/licensing-training-simplification/ [accessed 18 November 2025].

[6] CAA webinar providing guidance for teaching partial power loss scenarios https://www.youtube.com/watch?v=50tJa2SCaF4 [accessed 18 November 2025].