

No: 11/87

Ref: 1c

Aircraft type and registration: Grumman AA-5 G-BAZF

No & Type of engines: 1 Lycoming O-320-E2G piston engine

Year of Manufacture: 1973

Date and time (UTC): 14 July 1987 at 1903 hrs

Location: Great Haldon, near Exeter, Devon

Type of flight: Private

Persons on board: Crew — 1 Passengers — None

Injuries: Crew — 1 (fatal) Passengers — N/A

Nature of damage: Aircraft destroyed

Commander's Licence: Private Pilot's Licence

Commander's Age: 50 years

Commander's Total Flying Experience: 118 hours (of which 42 were on type)

Information Source: AIB Field Investigation

The aircraft was on a flight from a private landing strip at Claybrooke Lodge Farm, Frolesworth, Leicestershire to Land's End Aerodrome; the single pilot/owner was on board. At 1505 hrs on 14 July 1987 the pilot telephoned the Air Traffic Control (ATC) duty controller at Land's End aerodrome and advised him of his intention to make the flight and gave an arrival time of between 1800 and 1900 hrs. The controller warned the pilot that the Land's End weather was poor and that there would be no ATC services or aerodrome lighting available at his expected arrival time. This information was acknowledged and the call terminated.

It was not possible to trace any witness who had observed the aircraft take-off from Claybrooke Lodge Farm, however it is estimated that this was at about 1730 hrs. Thereafter the aircraft's track has been deduced from radiotelephony recorded messages (RTF) and a radar recording of the final stages of the flight. After take-off the first contact by G-BAZF with any ATC unit was at 1806 hrs when the pilot called Bristol Airport and reported that he was tracking the motorway down towards Plymouth and maintaining 1500 feet. Bristol ATC cleared him to continue VFR and report passing Avonmouth. Relevant extracts from, or summaries of, RTF recordings during the whole flight are as follows:

1815 hrs — Bristol ATC: G-BAZF my suggestion to you is that you keep an eye on the weather now as you proceed southbound.... I've just spoken to Exeter and their weather is deteriorating quite quickly.... they have got 3000 metres in rain and one okta at 700 feet and six oktas at 1000 feet.....

1817 hrs — G-BAZF: Thank you Bristol. My idea was actually to track down towards Plymouth — I'm initially going to Land's End and I was then going to track off the Land's End beacon — apparently the weather at Land's End is quite clear.

1817½ hrs — Bristol ATC: Well then you have some bad weather probably to go through before actually getting into the clear....if you would like to continue you can maintain VFR and follow the motorway and you can always hopefully get into Exeter if it does not get too bad...

1820 hrs — Bristol ATC: G-ZF you are passing Filton airfield.

1825 hrs — G-BAZF: G-ZF estimating Clevedon..

1825 hrs — Bristol ATC: Thank you.... you can continue to follow the motorway and report passing abeam Weston-super-Mare.

From this time the aircraft continued the flight following the motorway and successive positions reports abeam Weston-super-Mare, passing Bridgwater and Wellington were recorded. At 1839 hrs Bristol ATC attempted to contact G-BAZF with information concerning the weather at the Royal Air Force station, St.Mawgan. This information was not acknowledged by G-BAZF but was later relayed by Exeter Airport ATC.

At 1840 hrs G-BAZF contacted Exeter Airport ATC and the pilot reported that the aircraft's position was north of Taunton and that he intended following the motorway down towards Exeter and then trying to pick up the Land's End radio navigation beacon. He also reported that the aircraft's altitude was 1500 feet and that the weather was 'fairly thick in front but its quite clear here'. At 1844 hrs Exeter ATC asked the pilot if he required further weather information and the following exchange of messages was recorded:-

1844 hrs — Exeter ATC: Surface wind Exeter is 170 at 6 knots, visibility is 3000 metres in rain. One okta (cloud) at 700 feet, six octas at 1000 feet....

— G-BAZF: Thank you Exeter.

1845 hrs — Exeter ATC: Bristol tried to pass you the St Mawgan weather earlier and obviously you did not get it. St Mawgan weather is the wind 270 at 2 knots, visibility 2000 metres in mist, two oktas at 200 feet, five oktas at 300 feet and eight oktas at 4000 feet. St Mawgan think that Land's End weather will probably be as bad as that.

1845½ hrs — G-BAZF: Understood Exeter I have that — I can just about climb in under that I think.

At 1852 hrs Exeter ATC requested the pilot to select the code 7202 on the aircraft's transponder, and the aircraft's position was positively identified on secondary radar as being over the M5 motorway one mile south of Cullompton. The radar plot shows that the aircraft continued to follow the motorway until, at 1858 hrs, the following exchange of messages took place:-

G-BAZF: It's getting a little thick here, I'm down to 500 feet.

Exeter ATC: Yes, well the ground three miles ahead of you rises to over 800 feet.

G-BAZF: That is understood but the motorway goes straight through I believe.

Exeter ATC: Well it goes over the top of it.

G-BAZF: I'll see how I get on I'll come back to you if I get into trouble Exeter.

These were the last transmissions recorded from the aircraft and, at 1902½ hrs, it disappeared from radar cover. Also at this time witnesses at Haldon heights report hearing the sound of a low flying light aircraft followed by the sound of an impact in the trees. Subsequently they reported the crackling sound of a fierce fire.

Examination of the accident site showed that the aircraft had collided with the trees in an attitude of 40° nose down and 40° right bank. It had probably been in a stalled or semi-stalled condition. At the time of the impact the aircraft appeared to have been structurally complete. The severity of the fire damage made it impossible to establish whether or not the aircraft was suffering from any mechanical defect, or if the engine had been under power just prior to impact. However, the last height reported by the pilot had been 500 feet above mean sea level whilst the crash site was 760 feet above mean sea level. From that evidence and the fact that the severity of the fire indicated the presence of a considerable quantity of fuel, it must therefore be concluded that the engine had been capable of producing normal power.