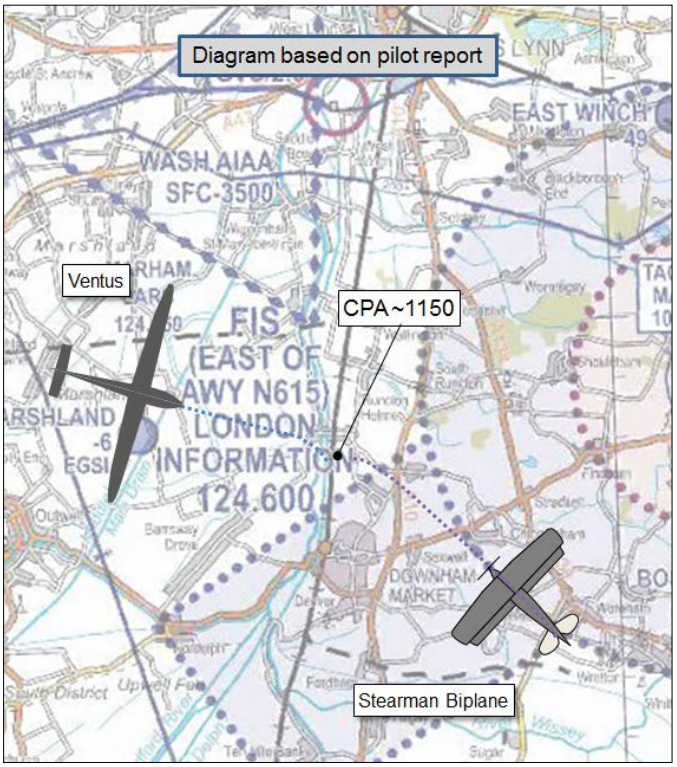
AIRPROX REPORT No 2016144

Date: 17 Jul 2016 Time: 1150Z Position: 5237N 00023E Location: 6.5nm WSW Marham

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Ventus 2	Stearman
Operator	Civ Pte	Unknown
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	NK
Service	None	
Provider	N/A	
Altitude/FL	NK	
Transponder	Not Fitted	
Reported		
Colours	White	Not Reported
Lighting	NK	
Conditions	VMC	
Visibility	20km+	
Altitude/FL	3200ft	
Altimeter	QFE (1020hPa)	
Heading	120°	
Speed	50kt	
ACAS/TAS	Not fitted	
Alert	N/A	
Separation		
Reported	100ft V/10m H	
Recorded	NK	



THE VENTUS 2 PILOT reports that he was climbing under the last cloud at the western end of a cloud street which stretched 5km east from his position. He spotted the other aircraft approximately 0.5km also flying along the cloud street towards his position. As it approached, it was flying on a heading which would take it just north of his position. However, as it got near to him, it changed heading gradually, onto a collision course. He had felt that as he was at 50 degrees of bank, his aircraft should be very visible against the blue sky as seen from the other pilots view. He rapidly rolled his wings to improve the chance of being seen and then descended in a right turn in avoiding action. The other aircraft passed directly through the centre of his circle. He called Lakenheath to report an Airprox and asked if they could track the other aircraft but it didn't show on their radar.

He assessed the risk of collision as 'High'.

THE STEARMAN PILOT could not be traced.

THE LAKENHEATH CONTROLLER was contacted by email and stated that the Ventus 2 simply came on frequency and asked if there was anything in his area because he had just had a close call with a biplane; he did not file an Airprox on frequency but said he would do so after landing. A replay of the Lakenheath radar revealed nothing.

Factual Background

The weather at Marham was recorded as follows:

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METAR EGYM 171050Z AUTO 27013KT 9999 FEW035/// 23/19 Q1021
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UKAB Secretariat

The Ventus 2 and Stearman pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard[1]. If the incident geometry is considered as head-on or nearly so then both pilots were required to turn to the right[2]. If the incident geometry is considered as converging then the Stearman pilot was required to give way to the Ventus 2[3].

Comments

BGA

A good spot by the Ventus pilot. It's unfortunate that the Stearman could not be traced. As a reminder to other pilots, lines of rising air are often found under wind-aligned 'cloud streets', and therefore gliders are likely to be encountered in these areas.

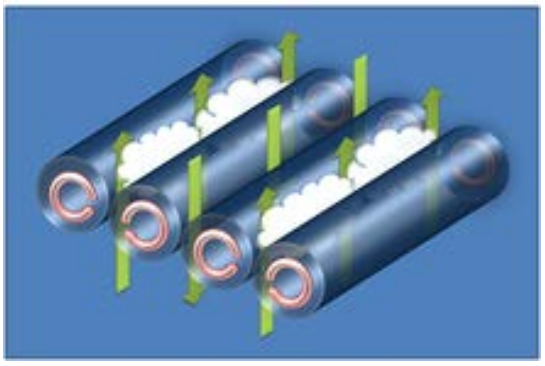
Summary

An Airprox was reported when a Ventus 2 and a Stearman flew into proximity at 1150 Sunday 17th July 2017. The Ventus 2 pilot was operating under VFR in VMC and not in receipt of a Service. The Stearman pilot could not be traced.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from the pilots of the Ventus 2, transcripts of the relevant RT frequencies, radar photographs/video recordings and reports from the air traffic controllers involved. The Stearman pilot could not be traced.

Looking first at the actions of the glider pilot, the Board Gliding member highlighted that glider pilots often use the updrafts associated with horizontal convective rolls also known as 'cloud streets' as a means of flying straight for long distances. Such cloud streets are identified by long rows of cumulus that are oriented parallel to the direction of the wind and are formed by rising warm air and sinking cool air that can often be identified by rows of cumulus when the air is close to saturation. He commented that other aviators should be aware of the high probability of gliders using these 'cloud streets' if they were present.



Turning specifically to this incident, the Board commended the Ventus pilot for his lookout and his early sighting of the Stearman. They then debated his further actions and, in initially determining that the course of the Stearman would allow the Ventus pilot to continue his present track, some members opined that he was probably justified in maintaining his course. That the Stearman pilot then turned unexpectedly towards him meant that the Ventus pilot was faced with a difficult decision between maintaining track (and lift) versus having to take avoiding action. Other members opined that perhaps the Ventus pilot had maintained his track along the cloud street for too long, and that it may have been prudent for him to have turned away from the Stearman earlier than he did because he could not know what the Stearman pilot's intentions were. The Board agreed that it was a finely balanced judgement either way, but that this incident highlighted the potential risks of assuming that another aircraft would maintain its track when deciding one's own course of action; better to generate a good degree of separation than to 'squeeze by' in the hope that the other pilot would not turn.

[1] SERA.3205 Proximity.
[2] SERA.3210 Right-of-way (c)(1) Approaching head-on.
[3] SERA.3210 Right-of-way (c)(2) Converging.

For his part, the Board were disappointed that the Stearman pilot could not be traced in order to present his perspective of events. However, they were able to deduce that, because he had gently turned towards the glider and took no avoiding action, it appeared that the Stearman pilot probably did not see the Ventus. Although they could not know the avionics fit of the aircraft, GA members commented that it was a shame that the Stearman pilot had not communicated with Lakenheath, even for just a Basic Service, in order to provide greater SA both to himself and other users. Although there was no requirement so to do in Class G airspace, and recognising that both the Stearman or the glider may not have shown on radar, this area was a known busy piece of airspace for which a LARS service would have been appropriate even if just to announce his intentions for the benefit of others listening out.

The Board then looked at the cause of the Airprox and agreed that the Ventus pilot had seen the Stearman with sufficient time to monitor the aircraft and react to its untimely change in course. It was this change of course that had unfortunately resulted in the Airprox, and members agreed that the Stearman pilot, by altering course towards the Ventus, had probably not seen the Ventus. The Board therefore decided that the cause of the incident was a probable non-sighting by the Stearman pilot. Turning to the risk, members noted that the Ventus pilot had sight of the Stearman at all times and that, although safety had undoubtedly been degraded, he had therefore always been in a position to take timely enough action to avoid a collision as the Stearman gradually turned onto the collision course. As a result, and notwithstanding the Ventus pilot's assessment of the risk being high, they therefore assessed the incident as Category C.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A probable non-sighting by the Stearman pilot.

Degree of Risk: C.