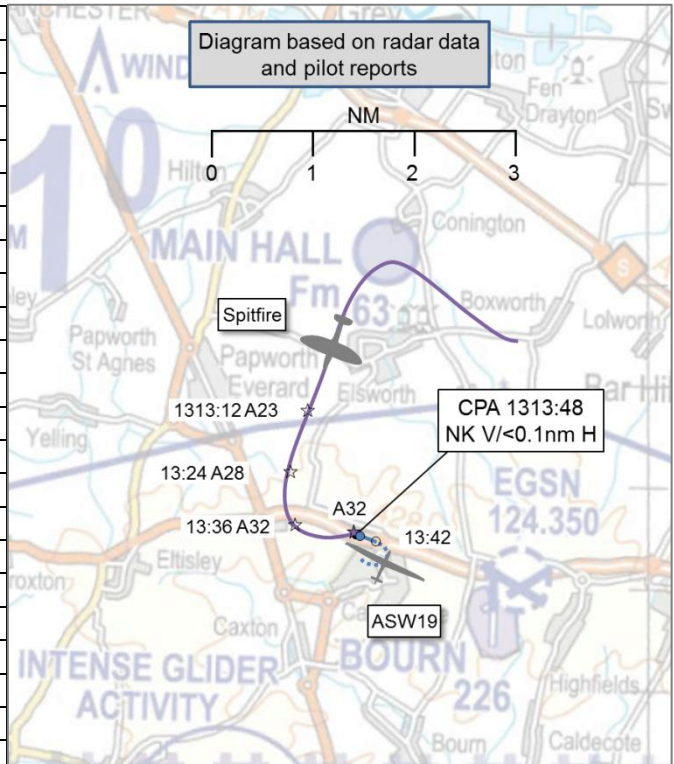


AIRPROX REPORT No 2015095

Date: 27 Jun 2015 Time: 1334Z Position: 5214N 00004W Location: 8nm west of Cambridge (Saturday)

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	ASW19	Spitfire
Operator	Civ Pte	Civ Comm
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	None	Basic
Provider	N/A	Cambridge
Altitude/FL	NK	3000ft
Transponder	Not fitted	A, C, S
Reported		
Colours	White	Grey/green
Lighting	Not fitted	None
Conditions	VMC	VMC
Visibility	>20km	10nm
Altitude/FL	2700ft	NK
Altimeter	QFE (1007hPa)	QNH (NK hPa)
Heading	320°	140°
Speed	55kt	150kt
ACAS/TAS	Not fitted	Not fitted
Separation		
Reported	<50ft V/ <100m H	Not seen
Recorded	NK V/ <0.1nm H	



THE ASW19 PILOT reports finishing a short cross-country task, making a final climb in a local thermal, at about 2-3 knots vertical velocity in a left hand turn, before making a short final glide back to his home airfield. He had been listening to Cambridge ATC as he approached the area, but had switched to his home airfield frequency in preparation for the final glide. He was aware that a WW2 fighter aircraft had been operating in the Papworth Everard area earlier in the day, so was not surprised when he spotted one travelling from his right to left in that area a few kilometres away. The aircraft was at a similar altitude to him. Soon afterwards he watched the aircraft commence a turn. Due to the position of the sun and aircraft colour scheme, only a black silhouette was visible and it was not initially possible to determine if the aircraft had turned away or towards him. A few seconds later he assessed that it had turned towards. He slowed his own turn rate to keep the other aircraft in view, and initially assessed that it would pass close to him but safely to his left provided he stopped turning. The aircraft continued to make small adjustments and, within a few seconds, was pointing straight at him. He 'waggled his wings' to see if the other aircraft would respond, but it did not. He was now conscious that its pilot probably could not see him due to the poor forward visibility of such aircraft, but that he was flying straight towards him. With limited options due to speed differential and poor manoeuvrability of the glider, he immediately made a sharp right turn, and the other aircraft passed less than 100m behind and 50ft above him. As he looked to reacquire the aircraft, now on his right, he saw it in a gentle left turn slightly above but now several hundred metres away.

He assessed the risk of collision as 'Medium'.

THE SPITFIRE PILOT reports operating one of several passenger flights that day. All Spitfire flights were in contact with Cambridge who, depending on radar availability, could provide a Basic or Traffic Service. Several glider pilots were heard speaking to Cambridge during the day, and information regarding any potential conflicts was passed to the pilot by Cambridge. He noted that, occasionally, reference to local villages or towns by glider pilots was not particularly helpful in establishing their

position for someone with little local geographic knowledge. Numerous gliders were observed during the day, although the pilot was unaware of an Airprox and surmised that he did not see the subject glider. He noted that gliders were particularly difficult to see, especially if not turning, and that from information provided when the Airprox was reported to him, it may have been the case that the glider was obscured by the long nose of the Spitfire, and subsequently by the wing, if the aircraft was (as reported) in a turn. He also noted that passengers were briefed on the risks of flight in Class G airspace as part of the CAA approval, and were requested to point out traffic to the handling pilots. On this occasion, the passenger made no comment regarding the alleged Airprox and therefore the pilot assumed he saw nothing either.

THE CAMBRIDGE CONTROLLER did not file a report.

Factual Background

The weather at Cambridge was recorded as follows:

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METAR EGSC 271320Z 23009KT 170V290 9999 FEW048 20/11 Q1019
METAR EGSC 271350Z 25008KT 160V310 9999 FEW048 23/10 Q1019
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Analysis and Investigation

CAA ATSI

The Spitfire pilot was operating under a Basic Service from Cambridge Radar. He was observed on radar operating in the vicinity of Gransden Lodge. An intermittent primary only contact appeared on radar for a short period in an area the Spitfire had passed, but this could not be identified, and it was not possible to measure the CPA.

Under a Basic Service a controller is not required to monitor a flight and a pilot remains responsible for collision avoidance.

UKAB Secretariat

The ASW19 and Spitfire pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard¹. If the incident geometry is considered as head-on or nearly so then both pilots were required to turn to the right². If the incident geometry is considered as converging then the Spitfire pilot was required to give way to the ASW19³.

Comments

BGA

The BGA is encouraged by the awareness of the Spitfire pilot of his proximity to Gransden Lodge and the gliding taking place near there. It also demonstrates that if you operate in the near vicinity of a gliding site on a sunny summer weekend day, you may well encounter a glider.

Summary

An Airprox was reported when an ASW19 and a Spitfire flew into proximity at 1334 on Saturday 27th June 2015. Both pilots were operating under VFR in VMC, the ASW19 pilot not in receipt of an Air Traffic Service and the Spitfire pilot in receipt of a Basic Service from Cambridge.

¹ SERA.3205 Proximity.

² SERA.3210 Right-of-way (c) (1) Approaching head-on.

³ SERA.3210 Right-of-way (c) (2) Converging.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from the pilots of both aircraft, radar photographs/video recordings and a report from the appropriate ATC authority.

The Board noted that the Spitfire pilot was operating in a promulgated area of intense gliding activity but that all airspace users nonetheless had equal right of access to the airspace in that vicinity. Given that glider pilots are somewhat limited in their operating area by the lack of on-board propulsive power, and would necessarily be more likely to be found operating within gliding range of their airfield, members wondered whether it would have been possible for the Spitfire pilot to operate elsewhere. After some discussion, it was agreed that, bearing in mind they were carrying passengers, it was for the Spitfire operating company to make their own risk assessment regarding their operating areas in accordance with established SMS principles. Notwithstanding, the avoidance of Areas of Intensive Gliding Activity made clear sense where possible, given that they were marked on the CAA VFR charts for obvious reasons.

Members felt that the ASW19 pilot had seen the Spitfire in good time, but that his glider's lack of manoeuvrability, and the coincidental converging course corrections by the Spitfire pilot, had resulted in a confliction. It was also felt that the Spitfire had converged on the glider, and that it was therefore for the Spitfire pilot to give way, which he had not been able to do because he had not seen the glider; this was considered the cause. Members discussed the degree of lookout afforded from the Spitfire cockpit, and noted that the reported speed was relatively slow for this aircraft thereby increasing its angle of incidence, which in itself would not have assisted forward lookout. In determining the risk, some members felt that the glider pilot had taken effective and timely action, but the majority were of the opinion that, in this case, safety margins had been much reduced below the normal.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A non-sighting by the Spitfire pilot.

Degree of Risk: B.