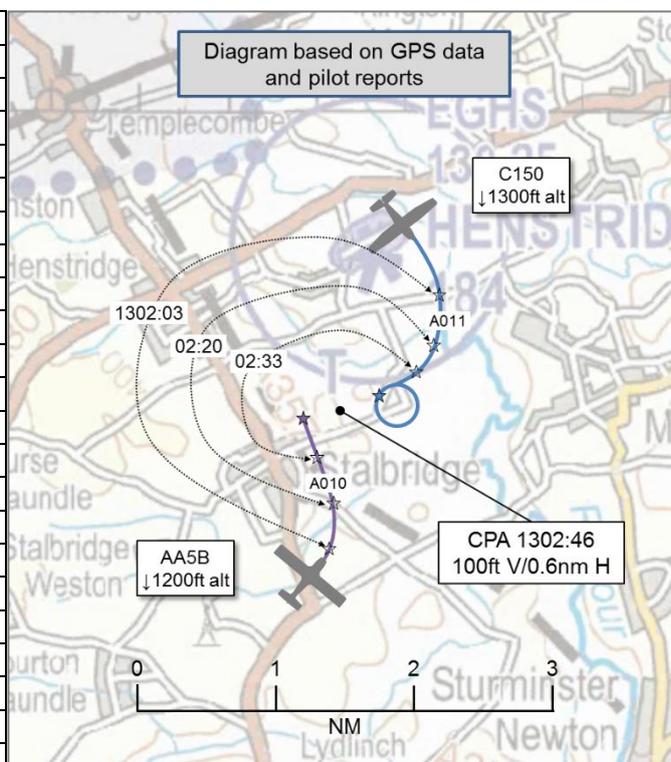


**AIRPROX REPORT No 2019229**

Date: 04 Jul 2019 Time: 1303Z Position: 5058N 00221W Location: Henstridge circuit.

**PART A: SUMMARY OF INFORMATION REPORTED TO UKAB**

Recorded	Aircraft 1	Aircraft 2
Aircraft	C150	AA5B
Operator	Civ FW	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	AGCS	AGCS
Provider	Henstridge	Henstridge
Altitude/FL	1081ft	1015ft
Transponder	A, C, S	A, C
<b>Reported</b>		
Colours	White/Blue	White/Red/Blue
Lighting	Strobes	
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	1073ft	800ft
Altimeter	Not Reported	Not Reported
Heading	245°	~315°
Speed	80kt	110kt
ACAS/TAS	Not fitted	Not fitted
Alert	N/A	N/A
<b>Separation</b>		
Reported	0ft V/200m H	Not Reported
Recorded	66ft V/ 0.57nm H	



**THE C150 PILOT** reports being inbound to Henstridge with a passenger who was also a PPL(A) holder and familiar with aircraft type. Two-way communications with Henstridge Radio had been established and an overhead join for RW07RH had been completed in accordance with their circuit procedures. On leaving the deadside and crossing the upwind end of the runway, the pilot heard another aircraft transmit on frequency that they were to the south of the aerodrome and would be joining right-base to land. This call immediately caught the pilot’s attention as, he reports, Henstridge really prefers overhead joins (as detailed on their website). Realising that there was a chance of conflict with the traffic joining base, the pilot made a prompt report of “downwind” to alert the pilot of the other aircraft that the C150 was already established in the circuit, in the hope that they might reconsider their join. There was no response to this transmission from the other aircraft. During the turn from the upwind end of the runway onto the downwind leg, the C150 pilot spotted the traffic and remained visual up until he initiated his avoiding action. Once abeam the downwind end of the runway, it became apparent that the aircraft joining base had not seen his aircraft and would be cutting in front of the C150. The C150 pilot immediately began a left-hand orbit on the downwind leg to deconflict from the AA5B, taking his aircraft away from both the traffic and the airfield itself. The AA5B passed near enough that the C150 pilot was able to read the registration on the side of the fuselage. After orbiting once, the C150 pilot then flew the circuit and landed without further incident. He opined that, in joining onto base leg, the other aircraft likely overflew one of the noise-sensitive areas surrounding Henstridge: Stalbridge. This area is detailed on both the published procedures on the Henstridge website, and was on SkyDemon.

The pilot assessed the risk of collision as ‘Medium’.

**THE AA5B PILOT** reports that neither he nor his right-seat passenger (a full-time instructor on Tiger Moths at Henstridge) either saw or since remembered the other aircraft. The flight was to demonstrate the aircraft to the passenger and, as handling pilot at the time, he was following their navigation instructions to avoid noise-sensitive areas and fly a curved approach to RW07RH. The pilot stated that,

since this Airprox, he has been advised by the same Tiger Moth instructor that right-base joins for RW07RH are perfectly normal procedures for Henstridge. The pilot reports being a little surprised at the report of the other pilot saying he was so close he could read the registration on the side of his aircraft, and also that he performed a left orbit on downwind. In his view, it would perhaps have been safer if the C150 pilot had passed behind the AA5B and extended the downwind leg accordingly. Had the AA5B pilot seen the C150 then, because the AA5B was ahead of the Cessna in the circuit, he would have continued on right-base and descended to avoid conflict. He considered this incident to be a normal event on visual circuits and is part of the day-to-day VFR responsibility of see-and-be-seen.

The pilot assessed the risk of collision as 'None'.

**THE AIR/GROUND OPERATOR** does not recall anything unusual about the flow of traffic in the circuit at the time in question.

## Factual Background

The weather at RNAS Yeovilton was recorded as follows:

METAR EGDY 041250Z 02004KT CAVOK 23/09 Q1024 NOSIG RMK BLU BLU=

## Analysis and Investigation

### UKAB Secretariat

The C150 and AA5B pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard.<sup>1</sup> An aircraft operated on or in the vicinity of an aerodrome shall conform with or avoid the pattern of traffic formed by other aircraft in operation.<sup>2</sup>

## Summary

An Airprox was reported when a C150 and an AA5B flew into proximity in the Henstridge visual circuit at 1303hrs on Thursday 4<sup>th</sup> July 2019. Both pilots were operating under VFR in VMC and in receipt of an AGCS from Henstridge.

## **PART B: SUMMARY OF THE BOARD'S DISCUSSIONS**

Information available consisted of reports from both pilots and a report from the Air/Ground Operator involved. Relevant contributory factors mentioned during the Board's discussions are highlighted within the text in bold, with the numbers referring to the Contributory Factors table displayed in Part C.

The Board first considered the actions of the C150 pilot. Members were in agreement that he had taken reasonable actions to alert the AA5B pilot to his presence in the circuit but that this did not necessarily indicate that the AA5B pilot was aware that the C150 was downwind. Some members wondered whether the C150 pilot had considered, during his downwind leg, what actions he would take should the pilot of the AA5B continue with his join ahead of him – the C150 pilot had been visual with the AA5B throughout the time he was downwind and it seemed to the Board that, by the time the C150 pilot had decided to take action to increase separation, he was already closer than he would have preferred to be and a perhaps avoidable orbit at the end of the downwind leg had then been his only feasible option (**CF4, CF6**).

Turning to the actions of the AA5B pilot, the Board discussed the possibility that neither of the crew in the AA5B had either heard or assimilated the C150 pilot's positional calls, possibly due to in-cockpit exchanges regarding the navigational features for the 'curved approach' to RW07RH. Furthermore, the AA5B pilot's report states that neither of them saw (**CF5**) or remembered there being a C150 in the

<sup>1</sup> SERA.3205 Proximity.

<sup>2</sup> SERA.3225 Operation on and in the Vicinity of an Aerodrome.

circuit at the time of their recovery. This led the Board to surmise that the AA5B pilot, having either not assimilated all the cues to the presence of the C150, or looked downwind and not seen the Cessna, believed that there was no conflicting traffic at the time he was joining right-base. Notwithstanding, the Board was unanimous that it had been for the AA5B pilot to integrate with the C150 already established in the circuit, which the AA5B pilot could not achieve because he was unaware that there was anything with which to integrate (**CF2, CF3**). In this respect, members were uneasy about the AA5B pilot's comments that, even if he had seen the C150, he would have continued 'because he was ahead'; his was the aircraft that was joining the circuit in which the C150 was already established, and so it was for the AA5B pilot to integrate to avoid the C150, noting that integrating ahead of another aircraft, if there is room to do so, is perfectly acceptable.

The Board then discussed the role of the Henstridge Air/Ground Operator and quickly concluded that there was nothing more that he could have done to prevent the Airprox. He could not have known that the AA5B pilot had not assimilated the C150 pilot's radio calls and, in any case, he was not required to monitor the aircraft under an Air/Ground Service (**CF1**). It was, however, observed by Board members that there was a discrepancy in the 2 pilots' respective understanding of what were 'acceptable' joining procedures at Henstridge (noting that the Air/Ground Operator made no comment about the validity of the AA5B pilot's join); a GA member proffered that, if the right-base join for RW07RH was indeed a typical joining procedure at Henstridge, then this should be published on the Henstridge website and also in the UK AIP to ensure the widest possible awareness of the correct procedure.

When considering the risk, the Board took into account the fact that the AA5B pilot was unaware of the presence of the C150 but that this had been mitigated by the C150 pilot remaining visual with the AA5B throughout the downwind leg. With a CPA measured from the pilots' respective GPS log files of circa 70ft vertically and 0.57nm laterally, members agreed that, although safety had been degraded, there had been no risk of collision because the C150 pilot was always visual with the AA5B; risk Category C.

Subsequent to the Board, further evidence in the form of GPS log files that showed the actual tracks of both aircraft became available. This allowed a more accurate depiction and analysis of the event to be constructed. Pilots are reminded of the value of including all relevant recorded data, accurately reporting equipment fit and operating state, and providing as fulsome a description of relevant events as possible when submitting their reports, so that the Board has as much material as possible with which to conduct their deliberations.

## **PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK**

### Contributory Factors:

	2019229		
CF	Factor	Description	Amplification
	<b>Ground Elements</b>		
	• Situational Awareness and Action		
1	Contextual	• Situational Awareness and Sensory Events	Not required to monitor the aircraft under the agreed service
	<b>Flight Elements</b>		
	• Regulations, Processes, Procedures and Compliance		
2	Human Factors	• Flight Crew ATM Procedure Deviation	Regulations/procedures not complied with
	• Situational Awareness of the Conflicting Aircraft and Action		
3	Human Factors	• Understanding/Comprehension	Pilot did not assimilate conflict information
4	Human Factors	• Lack of Action	Pilot flew close enough to cause concern despite Situational Awareness
	• See and Avoid		

5	Human Factors	• Monitoring of Other Aircraft	Non-sighting or effectively a non-sighting by one or both pilots
6	Human Factors	• Perception of Visual Information	Pilot was concerned by the proximity of the other aircraft

Degree of Risk: C

Safety Barrier Assessment<sup>3</sup>

In assessing the effectiveness of the safety barriers associated with this incident, the Board concluded that the key factors had been that:

**Ground Elements:**

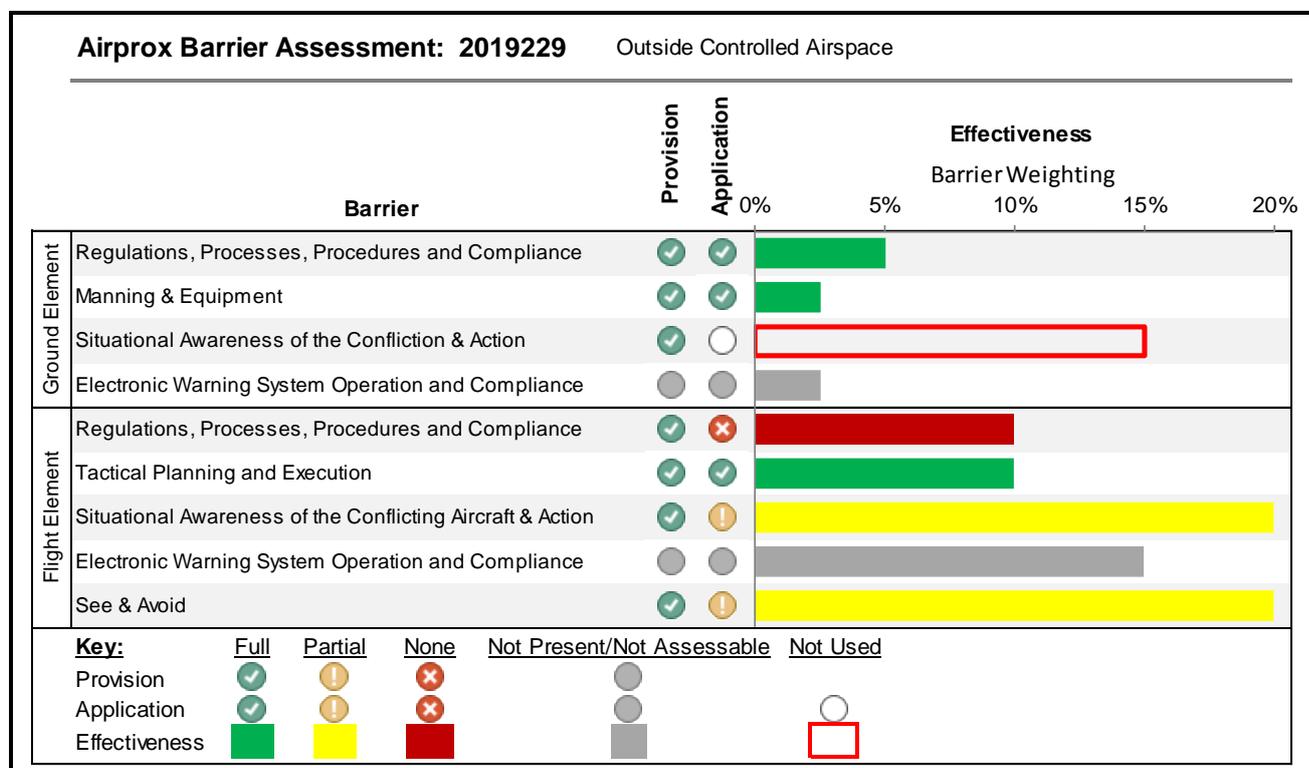
**Situational Awareness of the Confliction and Action** were assessed as **not used** because the Henstridge Air/Ground Operator was not required to monitor the aircraft.

**Flight Elements:**

**Regulations, Processes, Procedures and Compliance** were assessed as **ineffective** because the AA5B pilot did not integrate with the C150 already established in the visual circuit.

**Situational Awareness of the Conflicting Aircraft and Action** were assessed as **partially effective** because the C150 pilot heard the joining call from the AA5B pilot, was alerted to the potential conflict, and transmitted a 'downwind' call. However, the AA5B pilot did not assimilate the information from the C150 pilot.

**See and Avoid** were assessed as **partially effective** because the C150 pilot, although visual with the AA5B throughout the duration of his downwind leg, continued to the point where he had to take late avoiding action.



<sup>3</sup> The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).