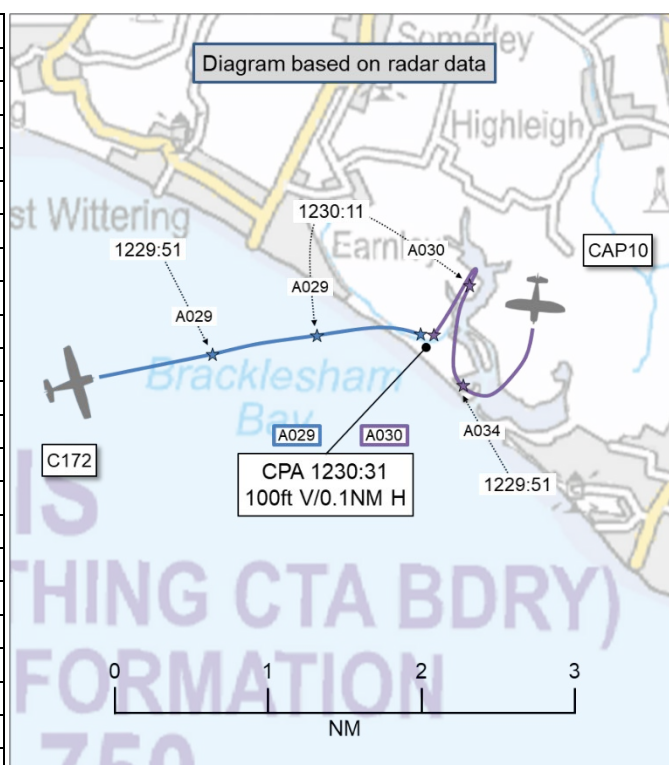


**AIRPROX REPORT No 2025012**

Date: 05 Feb 2025 Time: 1231Z Position: 5045N 00050W Location: 7NM SSW Goodwood

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

Recorded	Aircraft 1	Aircraft 2
Aircraft	C172	CAP10
Operator	Civ FW	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Listening out	Listening out
Provider	Bembridge Traffic	Goodwood Info.
Altitude/FL	2900ft	3000ft
Transponder	A, C, S	A, C, S
Reported		
Colours	White, red, blue	Red, white
Lighting	Landing, taxi, bcn	Strobes
Conditions	VMC	VMC
Visibility	NR	>10km
Altitude/FL	2900ft	"various"
Altimeter	QNH (1038hPa)	QNH
Heading	080°	"various"
Speed	110kt	"various"
ACAS/TAS	SkyEcho	Not fitted
Alert	None	N/A
Separation at CPA		
Reported	200ft V/200m H	1000ft V/1NM H
Recorded	100ft V/0.1NM H	



**THE C172 PILOT** reports that their planned route was along the coast at 2900ft on 1038hPa QNH. Nearing the coastline at Bracklesham Bay, an aircraft was noticed in the 11 o'clock position. It was about 200-300ft higher than them and was tracking approximately north-west. Its nose was high and they considered that its pilot would make an aerobatic manoeuvre with a possible course reversal that would place them into conflict with the [C172]. The pilot did make a course reversal and the aircraft was then tracking across their path and moved from their left-to-right in an approximately south-westerly track. [The pilot of the C172] altered heading to the left [they recall] by about 15° to direct their illuminated landing light at the aircraft. The aircraft passed in front of them, about 200ft above, at an approximate range of 200m.

The aircraft was kept in sight at all times and they were ready to take further avoiding action. Due to the aerobatic manoeuvre, they were uncertain of the pilot's next intentions.

[The pilot of the C172 commented that] they didn't report the Airprox on the radio as they had considered the separation to perhaps have been greater than initially perceived. However, after reviewing FlightRadar24, they have revised that opinion and would welcome a more detailed analysis.

The pilot assessed the risk of collision as 'Medium'.

**THE CAP10 PILOT** reports that [they were in] the Goodwood local area. They had contacted Goodwood to inform them of this and to request a Basic Service [they recall]. They turned off their SkyDemon at that point to save their phone's battery (although they have the recorded track until the frequency change). They had climbed to sufficient altitude to recover by 3000ft and completed the HASELL checks including clearing turns. They commenced aerobatics in the Bracklesham Bay area. They visually acquired the [C172] north of them transiting from west-to-east through the area [they believe]. They broke off their aerobatics and followed [that aircraft] to ensure they cleared away from their intended manoeuvres and recommenced their aerobatics. They later visually acquired the Cessna again, this

time transiting along the coast from east-to-west. They had visual contact with the Cessna at all times within their proximity [they believe] and did not feel that there was any risk of collision at all. They were therefore surprised to receive notification of this Airprox as they had proactively flown to keep out of [the pilot's] way. They did not hear any radio transmissions from the [pilot of the C172] on the Goodwood frequency throughout that time. [The pilot of the CAP10 opined that] they feel that this may have helped, although they are aware there had been no obligation for them to have done so.

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

**THE GOODWOOD AFISO** reports that, at 1222:16, the pilot of [the CAP10] transmitted: "[CAP10 C/S] returning from [airfield] but remaining in the local area, call you for rejoin". They, the AFISO, passed the QNH (1039hPa) and offered a Basic Service.

At no time did the pilot of [the CAP10] advise that they were doing aerobatics or request a Basic Service. Nothing was reported by the pilot of either aeroplane to the Goodwood ATS unit.

## Factual Background

The weather at Shoreham was recorded as follows:

METAR EGKA 051220Z 27004KT 9999 FEW024 09/09 Q1038

## Analysis and Investigation

### UKAB Secretariat

An analysis of the NATS radar replay was undertaken and both aircraft could be positively identified from Mode S data (Figure 1). The diagram was constructed and the separation determined from the radar data.

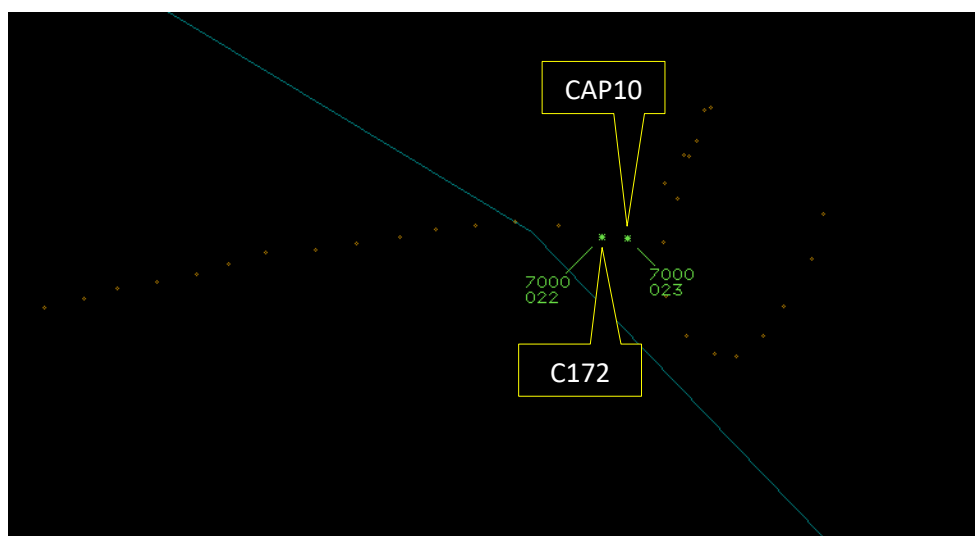


Figure 1 – CPA at 1230:31

The C172 and CAP10 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> If the incident geometry is considered as converging then the CAP10 pilot was required to give way to the C172.<sup>2</sup>

<sup>1</sup> (UK) SERA.3205 Proximity.

<sup>2</sup> (UK) SERA.3210 Right-of-way (c)(2) Converging.

## Summary

An Airprox was reported when a C172 and a CAP10 flew into proximity 7NM south-southwest of Goodwood at 1231Z on Wednesday 5<sup>th</sup> February 2025. The C172 pilot was operating under VFR in VMC listening-out on the Bembridge Traffic frequency and the CAP10 pilot was operating under VFR in VMC listening-out on the Goodwood Information frequency.

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

Information available consisted of reports from both pilots, radar photographs/video recordings and a report from the Goodwood AFISO. 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 pilot of the C172 and noted that they had tuned their radio to the Bembridge Traffic frequency. Members suggested that that frequency would not have provided the best picture of the traffic situation in the area to which they were flying and suggested that a call on the Goodwood frequency may have been a more prudent choice. Members agreed that the EC device fitted to the C172 would not have been expected to have detected the presence of the CAP10 (**CF3**). Consequently, it was agreed that the pilot of the C172 had not had situational awareness of the presence of the CAP10 until it had been visually acquired (**CF2**). It was noted that the pilot of the C172 had correctly assessed that the pilot of the CAP10 had conducted a manoeuvre that would result in a rapid change of direction. Members also noted that they had reported that they had kept the CAP10 "*in sight at all times*" and "*were ready to take further avoiding action*". Members were surprised that the pilot of the C172 had considered that the safest course of action had been to have changed track by 15° in order to direct their landing light towards the CAP10. It was suggested that, if they had been uncertain of the pilot's intentions, it may have been wiser to have taken far more positive action and avoided the area by a larger margin. Members agreed that the pilot of the C172 had not adapted their dynamic plan sufficiently to have met the needs of the unfolding situation (**CF1**) and had not appreciated the risk that their continued flight towards the area in which the pilot of the CAP10 had been manoeuvring had presented (**CF4**).

Members turned their attention to the actions of the pilot of the CAP10. It was noted that they had switched off their SkyDemon device in order to have preserved its battery. Some members suggested that it would have been preferable to have ensured that they had charged the battery sufficiently to have covered the period in which they were flying or to have carried a portable power supply. Members noted that the CAP10 had not been fitted with additional EC equipment and that their SkyDemon device may have provided useful information on the presence of the C172 or other traffic in the area. Noting that there had not been a common frequency in use between the pilots, members agreed that the pilot of the CAP10 had not had situational awareness of the C172 (**CF2**). One member commented that it may have been wise to have selected the transponder code 7004 before the sequence of aerobatic manoeuvres had been undertaken, although acknowledged that to have done so would not have affected the outcome in this particular case. Members pondered the reported visual acquisition of the C172 1NM to their north. Reviewing the radar replay, members surmised that the pilot of the CAP10 may have sighted an uninvolved aircraft that had been in the local area, 1NM to their north, a couple of minutes after the Airprox had occurred. Consequently, members agreed that the C172 had not been sighted at the time of the Airprox (**CF5**).

Turning to the actions of the Goodwood AFISO, members noted that, at the time of the Airprox, they had not provided a FIS to either pilot and agreed that there had been little that they could have done to have assisted matters.

Concluding the discussion, members summarised their thoughts. It was agreed that the pilot of the C172 had not had situational awareness of the presence of the CAP10 but had sighted it at distance. It was further agreed that the pilot of the CAP10 had not sighted the C172 during the encounter. Members noted that the pilot of the C172 had taken action to increase the separation but agreed that the situation had required far more positive avoiding action to have maintained normal safety margins. Nevertheless,

members were satisfied that there had not been a risk of collision and assigned Risk Category C to this event.

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

### Contributory Factors:

	2025012			
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification
	<b>Flight Elements</b>			
	<b>• Tactical Planning and Execution</b>			
1	Human Factors	• Insufficient Decision/Plan	Events involving flight crew not making a sufficiently detailed decision or plan to meet the needs of the situation	Inadequate plan adaption
	<b>• Situational Awareness of the Conflicting Aircraft and Action</b>			
2	Contextual	• Situational Awareness and Sensory Events	Events involving a flight crew's awareness and perception of situations	Pilot had no, late, inaccurate or only generic, Situational Awareness
	<b>• Electronic Warning System Operation and Compliance</b>			
3	Technical	• ACAS/TCAS System Failure	An event involving the system which provides information to determine aircraft position and is primarily independent of ground installations	Incompatible CWS equipment
	<b>• See and Avoid</b>			
4	Human Factors	• Lack of Individual Risk Perception	Events involving flight crew not fully appreciating the risk of a particular course of action	Pilot flew close enough to cause concern
5	Human Factors	• Monitoring of Other Aircraft	Events involving flight crew not fully monitoring another aircraft	Non-sighting or effectively a non-sighting by one or both pilots

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:

#### **Flight Elements:**

**Tactical Planning and Execution** was assessed as **ineffective** because, having sighted the CAP10 at distance, the pilot of the C172 had not adapted their dynamic plan sufficiently to have increased the separation.

**Situational Awareness of the Conflicting Aircraft and Action** were assessed as **ineffective** because neither pilot had situational awareness of the presence of the other aircraft until visually acquired.

**Electronic Warning System Operation and Compliance** were assessed as **ineffective** because the EC device fitted to the C172 would not have been expected to have detected the presence of the CAP10.

**See and Avoid** were assessed as **partially effective** because the pilot of the C172 had not fully appreciated the risk of their chosen course of action which had resulted in reduced safety margins.

<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](#).

Airprox Barrier Assessment: 2025012		Outside Controlled Airspace			
	Barrier	Provision	Application	Effectiveness	
				Barrier Weighting	
				0%	5% 10% 15% 20%
Ground Element	Regulations, Processes, Procedures and Compliance				
	Manning & Equipment				
	Situational Awareness of the Confliction & Action				
	Electronic Warning System Operation and Compliance				
Flight Element	Regulations, Processes, Procedures and Compliance				
	Tactical Planning and Execution				
	Situational Awareness of the Conflicting Aircraft & Action				
	Electronic Warning System Operation and Compliance				
	See & Avoid				
<b>Key:</b> <span>Full</span> <span>Partial</span> <span>None</span> <span>Not Present/Not Assessable</span> <span>Not Used</span>					
Provision					
Application					
Effectiveness					