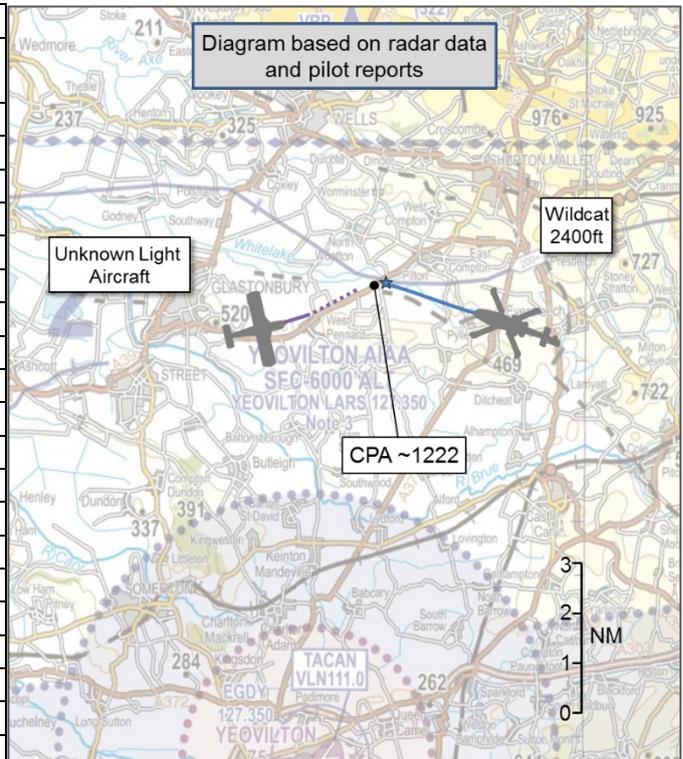


AIRPROX REPORT No 2020063

Date: 07 Jul 2020 Time: 1222Z Position: 5108N 00246W Location: 3NM E Glastonbury

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Wildcat	Unknown Light Aircraft
Operator	RN	Unknown
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	NK
Service	Traffic	NK
Provider	Yeovilton	
Altitude/FL	2400ft	
Transponder	A, C, S	Nil
Reported		
Colours	Grey	
Lighting	Nav, HISLs	
Conditions	VMC	NK
Visibility	20km	
Altitude/FL	2500ft	
Altimeter	QNH	
Heading	270°	
Speed	120kt	
ACAS/TAS	TAS	
Alert	None	
Separation		
Reported	0ft V/200m H	
Recorded		NK



THE WILDCAT PILOT reports that whilst conducting a partial test flight in the vicinity of Glastonbury the observer became visual with a light civilian fixed-wing aircraft in their 11 o'clock at approximately 2NM. They were receiving a Traffic Service from Yeovilton ATC but had not been notified of the traffic. The civilian aircraft passed 200m in front, at the same level. They did not see the other aircraft make any changes to their heading so believed the other pilot did not see the Wildcat at any point. The fixed-wing aircraft did not display on the TAS. They commenced a gentle left-hand turn to ensure separation, however, believed that if they had not become visual a collision would have been possible.

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

THE UNKNOWN LIGHT AIRCRAFT could not be traced.

THE YEOVILTON CONTROLLER reports that they were the instructor in the Radar Approach position during the reported Airprox. From recollection it was a medium intensity session with a Wildcat operating to the north and more rotary and fixed-wing aircraft operating to the south/southeast of Yeovilton. They recalled that there was a lot of background traffic in the southeast where the fixed-wing aircraft were general handling under a Traffic Service. Traffic Information on a non-squawking radar contact was given to the Wildcat pilot.

The controller perceived the severity of the incident as 'Low'.

Factual Background

The weather at Yeovilton was recorded as follows:

METAR EGDY 071150Z 24008KT 9999 FEW030 BKN070 18/10 Q1020 NOSIG RMK BLU BLU=

Analysis and Investigation

UKAB Secretariat

The Wildcat and unknown light aircraft 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 converging then the unknown aircraft pilot was required to give way to the Wildcat.²

Comments.

Navy HQ

An investigation was conducted in to this Airprox using several DASORs from both 825 NAS and Yeovilton ATC, along with tape transcripts and screen shots from the radar feed. The Airprox was not declared on frequency.

In the DASOR submitted by the Wildcat crew, they questioned whether they had received any Traffic Information regarding the conflicting light civilian fixed-wing as they did not recall any information being passed. Subsequent scrutiny of the tape transcripts reveal that Traffic Information was passed to the Wildcat crew at 4NM, with the aircrew becoming visual with the conflicting traffic at 2NM, allowing them to manoeuvre the air system to avoid a MAC.

The pilot of the civilian aircraft was unable to be traced as they were not in receipt of an ATS from Yeovilton ATC.

This Airprox highlights the non-prescriptive nature of flight in Class G Airspace where not all aircraft operating within this airspace will be transponder equipped or obliged to be in receipt of an ATS, thereby degrading the situational awareness of both aircrew and ATS providers. It also highlights the importance of aircrew lookout as a barrier in the prevention of MAC.

Summary

An Airprox was reported when a Wildcat and an unknown light aircraft flew into proximity in the vicinity of Glastonbury at 1222Z on Tuesday 7th July 2020. The Wildcat pilot was operating under VFR in VMC, and in receipt of a Traffic Service from Yeovilton. The light aircraft could not be traced.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from the Wildcat pilot, radar photographs/video recordings, reports from the air traffic controllers involved and reports from the appropriate operating authorities. Relevant contributory factors mentioned during the Board's discussions are highlighted within the text in bold, with the numbers referring to the Contributory Factors (CF) table displayed in Part C.

Due to the exceptional circumstances presented by the coronavirus pandemic, this incident was assessed as part of a 'virtual' UK Airprox Board meeting where members provided a combination of written contributions and dial-in/VTC comments.

The Board first discussed the actions of the Wildcat pilot. They were receiving a Traffic Service from Yeovilton ATC and did not recall receiving Traffic Information on the other aircraft when they saw it pass ahead at a similar altitude. In fact, the subsequent investigation showed that Traffic Information had been passed by the controller, but the unknown aircraft was not displaying Mode C and so the controller could not give any height information (**CF1**, **CF2**). Furthermore, the lack of Mode C meant that the Wildcat's TAS also could not detect the light aircraft (**CF3**). Fortunately, the Wildcat crew became visual at a range of 2NM and some members wondered whether the pilot was expecting the other pilot to give-

¹ SERA.3205 Proximity. MAA RA 2307 paragraphs 1 and 2.

² SERA.3210 Right-of-way (c)(2) Converging. MAA RA 2307 paragraph 12.

way to them because, having been visual so early, they still closed to a range of 200m. They opined that perhaps earlier action to remain clear would have been a better option given that the intentions of the other pilot were not known. That being said, the Wildcat pilot reported needing only to take a gentle turn to ensure adequate separation and reported the risk of collision as 'low'.

Without a report from the light aircraft pilot it was not known whether they were visual with the Wildcat and content with the separation, or had not seen it at all. Nevertheless, the action taken by the Wildcat pilot was enough to ensure that normal safety standards pertained and the Board assessed the event as a sighting report (**CF4**); Risk Category E.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

2020063			
CF	Factor	Description	Amplification
Ground Elements			
• Situational Awareness and Action			
1	Contextual	• Situational Awareness and Sensory Events	The controller had only generic, late or no Situational Awareness
Flight Elements			
• Situational Awareness of the Conflicting Aircraft and Action			
2	Contextual	• Situational Awareness and Sensory Events	Pilot had no, late or only generic, Situational Awareness
• Electronic Warning System Operation and Compliance			
3	Technical	• ACAS/TCAS System Failure	Incompatible CWS equipment
• See and Avoid			
4	Human Factors	• Monitoring of Other Aircraft	Sighting report

Degree of Risk: E.

Safety Barrier Assessment³

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

Flight Elements:

Situational Awareness of the Conflicting Aircraft and Action were assessed as **partially effective**; the Wildcat pilot was only given generic Traffic Information by ATC because they could not see the light aircraft's altitude on the radar.

Electronic Warning System Operation and Compliance were assessed as **ineffective** because the TAS in the Wildcat could not detect the non-transponding light aircraft.

³ 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: 2020063 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	✓	✓			
Key:		Full	Partial	None	Not Present/Not Assessable	Not Used
Provision	✓	⚠	✗	○		
Application	✓	⚠	✗	○	○	
Effectiveness	■	■	■	■	□	