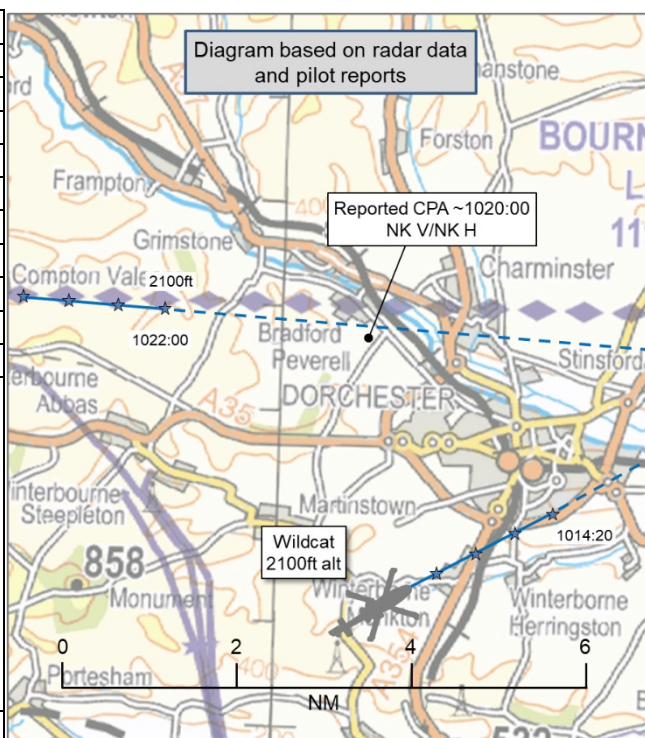


AIRPROX REPORT No 2025091

Date: 20 May 2025 Time: ~1020Z Position: 5044N 00228W Location: 1NM Northwest of Dorchester

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Wildcat	Unknown
Operator	HQ JAC	Unknown
Airspace	London FIR	London FIR
Class	G	G
Rules	IFR	Unknown
Service	Basic	Unknown
Provider	Yeovilton Approach	Unknown
Altitude/FL	2100ft	Unknown
Transponder	A, C, S	None
Reported		
Colours	Grey	Unknown
Lighting	Strobes, Indg, nav	
Conditions	VMC	
Visibility	>10km	
Altitude/FL	2000ft	
Altimeter	RPS (1017hPa)	
Heading	270°	
Speed	130kt	
ACAS/TAS	TAS	
Alert	None	
Separation at CPA		
Reported	0ft V/150m H	NK
Recorded	NK	



THE WILDCAT PILOT reports that, during an acquisition for a Rotor Track and Balance (RTB) run at 120kt IAS and 2000ft, whilst heading west approximately 1NM northwest of Dorchester, the HP spotted a civilian light fixed-wing aircraft in the 10 o'clock approximately 150m, same level apparently taking avoiding action banking right to pass behind them. No indications were shown on TAS. They had been in receipt of a Basic Service at the time with Yeovilton Approach UHF frequency and reported the Airprox on frequency. No avoiding action was required from themselves due to the late spot and effective action from the sighted aircraft.

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

THE PILOT of the unknown aircraft could not be traced.

THE YEOVILTON APPROACH CONTROLLER reports that they had been tasked with the duty of Approach controller with all the radar frequencies selected which included Lower Airspace Radar Service and Instrument Flying. The traffic levels were very low at the time with only 3 aircraft with them on frequency, all under a Basic Service. The 3 aircraft were being monitored, 2 civilian light-aircraft and one military helicopter to the south. The helicopter to the south was operating clear of traffic with one radar contact noted. This contact was a non-squawking contact slow-moving and had been spotted 10/8/6NM from the aircraft and on two occasions and had disappeared completely, so was deemed to be possibly spurious.

At approximately 1020 the [pilot of the] Wildcat, which had been conducting a partial test flight (PTF) to the south, declared an Airprox on frequency stating an aircraft had flown within 150m at the same level. A radar contact was seen 4NM east and tracking east.

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

Factual Background

The weather at Yeovilton was recorded as follows:

METAR EGDY 201020Z 02007KT CAVOK 19/06 Q1021 NOSIG RMK BLU BLU=

Analysis and Investigation

Military ATM

The Yeovilton Approach controller (APP) correctly discharged their duties in accordance with national and local procedures and regulations. The Wildcat pilot had been in receipt of a Basic Service at the time. Under CAP 774 2.5 Basic Service Traffic Information (TI), the provider of a Basic Service is not required to monitor the flight, and the pilot should not expect any form of TI. The controller stated that they had seen a non-squawking intermittent primary radar contact at a range of 10/8/6NM from the Wildcat. The Wildcat had been operating at approximately 2000ft at a range of 18NM SSE of Yeovilton, likely operating near the edge of radar coverage which may explain the intermittent presentation of the non-squawking aircraft on the radar screen.

On reviewing the Yeovilton ATC radar recording from time 1017:51 to time 1018:34, the Yeovilton radar screen was zoomed in by the radar controller to the Yeovilton MATZ, meaning the 3 x BS aircraft were not visible. From time 1018:34 the radar screen was ranged back out to the normal 40NM operating range; from this time until 1019:25 (reported CPA) the non-squawking aircraft had been visible on the radar screen. Under CAP774 the controller may have given TI to the pilot even under a BS if they felt it was relevant.

The assessment of this Airprox is challenging given the pilot of the civilian aircraft was not traced nor their track effectively recorded. Selection of an Air Traffic Service (ATS), of any level, is not a sole barrier to avoid a mid-air collision (MAC). Whilst with hindsight a higher level of ATS could have been selected, the scant radar evidence suggests this may not have been effective either. Other technical barriers such as Traffic Avoidance Systems have a part to play, but did not trigger an alert in this Airprox. In this case, the manoeuvre of the civilian aircraft suggested that the first principle to avoid a MAC by an effective lookout to see and avoid may have been the final and effective barrier to prevent the top level MAC event from occurring. The key here is that whilst a series of barriers are in place to prevent the MAC, none are a substitute for each other. All must remain in place and be effective to reduce the probability of the top level event occurring.

UKAB Secretariat

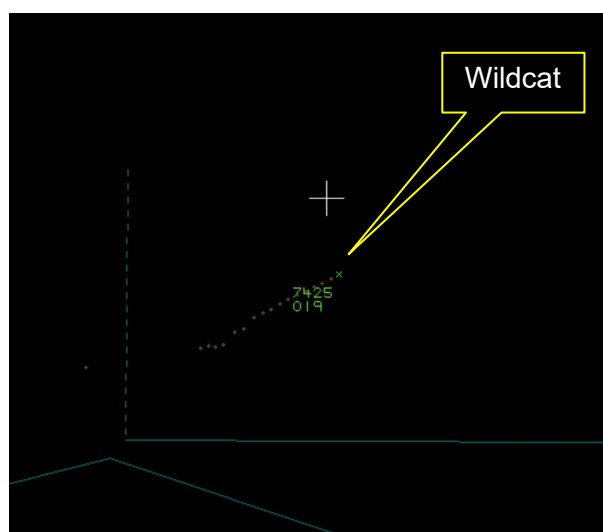


Figure 1: At 1014:20. White cross marks the reported CPA

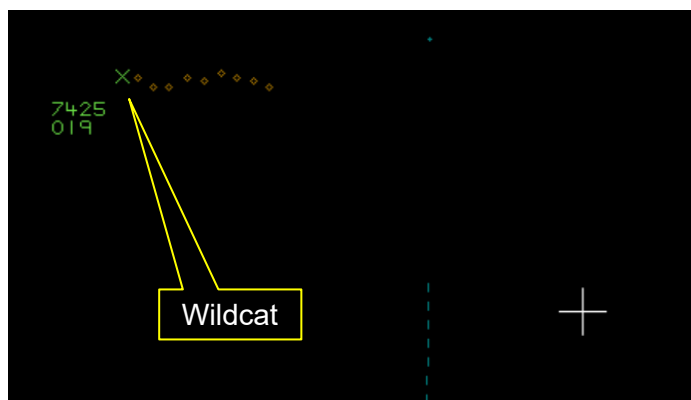


Figure 2: At 1022:59. White cross marks the reported CPA.

The Wildcat was tracked intermittently on radar and identified through Mode S. The unknown aircraft did not appear on radar or ADS-B and MLAT tracking tools. Figures 1 and 2 above show those relevant parts of the Wildcat track that showed on radar.

The Wildcat and unknown 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

Comments

JAC

During a routine PTF that included RTB manoeuvres, the Wildcat had been operating in an area frequently used for such activities, ensuring sufficient distance from known glider and GA sites, as well as deconflicting with other Station traffic. Prior to the sortie, a detailed discussion was held regarding the proximity to the coast and the potential for increased GA activity, as pilots may use the coastline as a navigational handrail. Mitigations for MAC were thoroughly considered, including the use of TAS, vigilant lookout, coordinated “eyes in/out” calls, and effective cockpit management. The aircraft was configured for maximum conspicuity, and the crew opted for a Basic Service, which was deemed standard for this type of activity. While a Traffic Service might have prompted ATC to provide Traffic Information (TI), the ATC investigation revealed an intermittent and ‘spurious’ contact in the vicinity of the Wildcat’s operations. Whilst the crew acknowledged that Yeovilton ATC is typically proactive in providing TI, even under a Basic Service, iaw CAP 774, the provider of a Basic Service is not required to monitor the flight, and pilots should not expect TI from a controller or FISO under this service.

The crew only became aware of the other aircraft when it appeared to take avoiding action. They identified a contributing factor to the non-sighting or late sighting as the cockpit windscreen pillars, which obscured their view, combined with the absence of a TAS indication. This Airprox serves as a timely reminder of the risks associated with operating in Class G airspace, where other airspace users are not mandated to carry EC devices or communicate with local units. It underscores the importance of maintaining a vigilant lookout as the primary means of collision avoidance in such environments.

Summary

An Airprox was reported when a Wildcat and an unknown aircraft flew into proximity 1NM northwest of Dorchester at ~1020Z on Tuesday 20th May 2025. The Wildcat pilot was operating under IFR in VMC in receipt of a Basic Service from Yeovilton Approach. Unfortunately, the other aircraft could not be traced.

¹ (UK) SERA.3205 Proximity. MAA RA 2307 paragraphs 1 and 2.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of a report from the Wildcat pilot, radar photographs/video recordings, a report from the air traffic controller 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 table displayed in Part C.

The Board noted the lack of information regarding the second aircraft in this particular incident and therefore focussed their attention on the reports from the Wildcat pilot and the Yeovilton controller. Members noted the nature of the flight that the Wildcat pilot had been undertaking and that they had agreed a Basic Service from Yeovilton to complement their lookout as they had progressed. Members felt that, although the aircraft had been operating toward the limits of cover for Yeovilton, the Wildcat pilot might have considered requesting a Traffic Service to ensure a more-prioritised focus on their exercise by the controller (**CF2**). The Board also noted that the aircraft had been equipped with a TAS unit which, in this case, had unfortunately not received any warning from the unknown aircraft. The lack of any situational awareness of the presence of the unknown aircraft (**CF3**) and late sighting of it by the Wildcat pilot (**CF4**) had been mitigated on this occasion by the apparent avoiding action taken by the pilot of the unknown aircraft, witnessed by the Wildcat pilot.

Turning to the actions of the Yeovilton controller, the Board noted that the Wildcat pilot had been in receipt of a Basic Service from them and had been operating toward the limit of coverage of that unit. They recognised that there is no requirement for the controller to monitor an aircraft in receipt of such a service (**CF1**) but that an intermittent return had been witnessed on occasion in the operating area of the Wildcat and there had been an opportunity to warn the pilot of that traffic even under that Basic Service. Members accepted that the service requested was provided in accordance with the relevant parts of CAP 774.

The Board noted that their deliberations had been based primarily on consideration of the Wildcat pilot's and Yeovilton controller's reports and that overall the information available to them had been too little to enable a sound assessment of risk to be made. Therefore, a Risk Category D was assigned to this event.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2025091			
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification
	Ground Elements			
	• Situational Awareness and Action			
1	Contextual	• ANS Flight Information Provision	Provision of ANS flight information	The ATCO/FISO was not required to monitor the flight under a Basic Service
	Flight Elements			
	• Tactical Planning and Execution			
2	Human Factors	• Communications by Flight Crew with ANS	An event related to the communications between the flight crew and the air navigation service.	Pilot did not request appropriate ATS service or communicate with appropriate provider
	• Situational Awareness of the Conflicting Aircraft and Action			
3	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
	• See and Avoid			
4	Human Factors	• Identification/ Recognition	Events involving flight crew not fully identifying or recognising the reality of a situation	Late sighting by one or both pilots

Degree of Risk: D.

Safety Barrier Assessment²

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

Ground Elements:

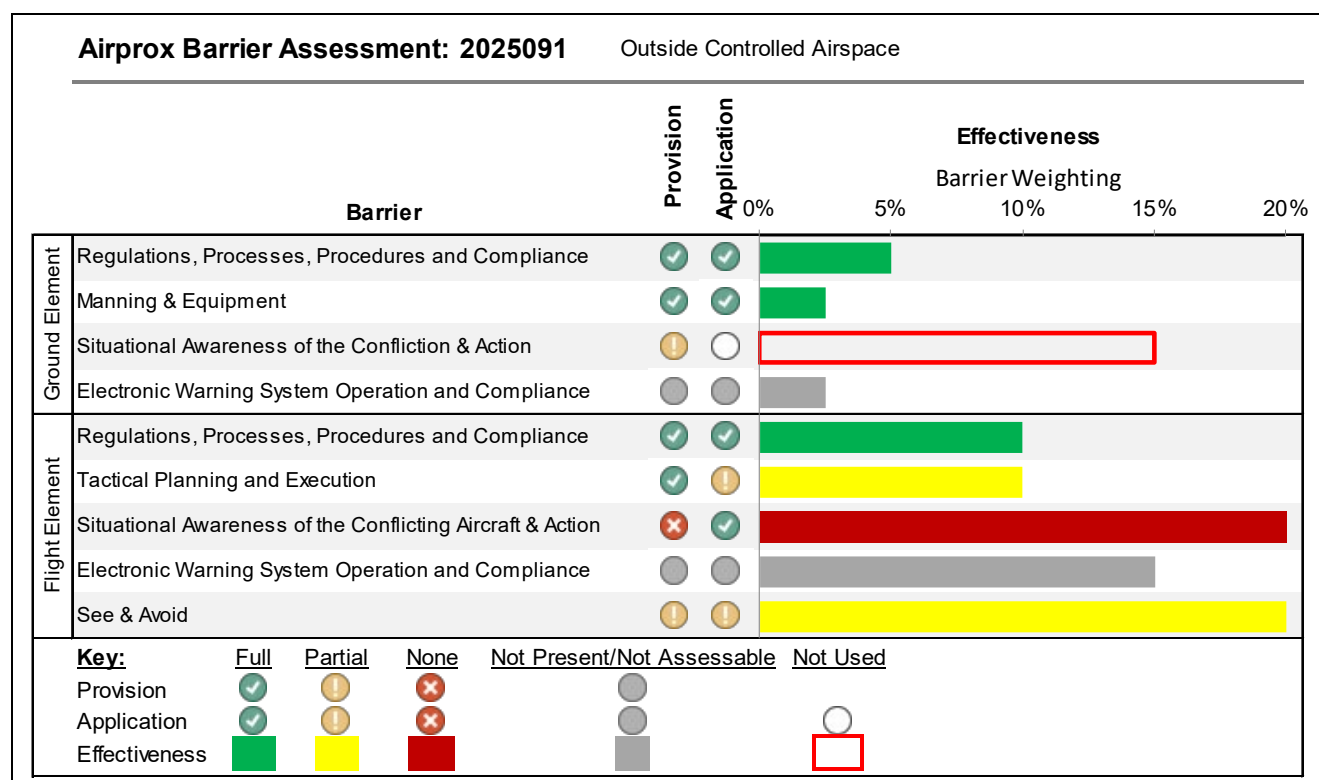
Situational Awareness of the Confliction and Action were assessed as **not used** because the Yeovilton ATCO was not required to monitor the flight under a Basic Service.

Flight Elements:

Tactical Planning and Execution was assessed as **partially effective** because the Wildcat pilot could have asked for a higher level Air Traffic Service.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because the Wildcat pilot had no situational awareness of the presence of the unknown aircraft.

See and Avoid were assessed as **partially effective** because the Wildcat pilot achieved only a late sighting of the unknown aircraft.



² The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).