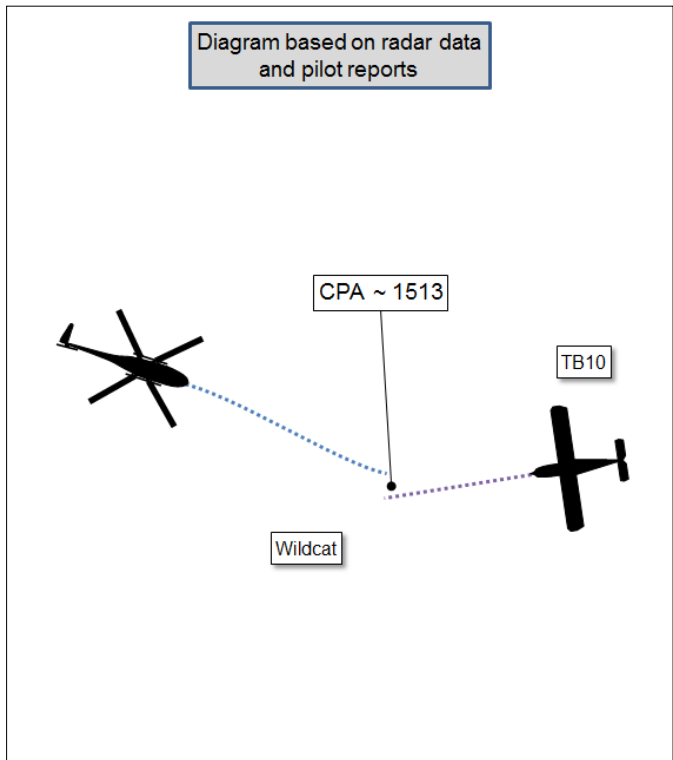


**AIRPROX REPORT No 2017132**

Date: 14 Jun 2017 Time: 1513Z Position: 5101N 00251W Location: Curry Rivel

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

Recorded	Aircraft 1	Aircraft 2
Aircraft	Wildcat	TB10
Operator	HQ AAC	Civ Pte
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Basic	Basic
Provider	Merryfield	Yeovilton
Altitude/FL	NK	NK
Transponder	C, S	S
Reported		
Colours	Not reported	White, Blue, red
Lighting	Not reported	Strobe, Landing
Conditions	VMC	VMC
Visibility	>10km	10km
Altitude/FL	700ft	300
Altimeter	QFE (1011hPa)	QFE
Heading	080°	240°
Speed	110kt	75kt
ACAS/TAS	TAS	Not fitted
Alert	None	N/A
Separation		
Reported	200ft V/NK H	300ft V/300m H
Recorded	NK	



**THE WILDCAT PILOT** reports that he was at the end of a GH sortie recovering to his base at 700ft on the Southern Route. Abeam Curry Rivel he made a late spot on a civilian fixed-wing aircraft which passed approximately 150 to 200ft below and to the left. No avoiding action was required. The aircraft was immediately called to Merryfield Tower by the aircraft commander and an Airprox subsequently called over the radio. Nothing was seen on TAS. The aircraft was recovered to Yeovilton without further incident.

He assessed the risk of collision as 'Medium'.

**THE TB10 PILOT** reports that he saw the helicopter 1km away and was aware it would overfly his airstrip; he considered the safest option was to continue his approach and descend to land. He endeavoured to ensure full visibility by displaying his strobe and landing lights. This was not the first occasion when military helicopters had over flown his airstrip following the runway direction below circuit height. On this occasion it was passing above and to the port side so he did not consider there to be a risk of collision. He has been discouraged from using the Merryfield Tower frequency in the past but remained very willing to liaise with those responsible for the military operations in their zone over ways to collectively reduce the risk to the respective operations.

He assessed the risk of collision as 'None'.

**THE MERRYFIELD CONTROLLER** reports that at 1609 local the Wildcat reported exercise complete and ready to return to RNAS Yeovilton, he instructed the aircraft pilot to hold whilst he obtained a release for the Southern Route to Yeovilton; although the route is VFR, this is SOP when Yeovilton are operating on RW09RH, due to RW occupancy issues. Having obtained a clearance, he instructed the Wildcat to return to Yeovilton via the Southern Route and gave him the Yeovilton QFE. A short while later the Wildcat pilot reported being visual with 2 light fixed-wing aircraft at approx 300ft in the

vicinity of Fivehead (although this is a visual check point, the aircraft was nearer to Curry Rivel where there is a light-aircraft landing strip). He informed the pilot of this and added that he was not aware of aircraft operating there. The pilot then said he would be filing an Airprox and the controller replied that he would annotate the Watch Log accordingly. The controller contacted Yeovilton Radar to ask if they knew of any light fixed-wing aircraft operating in that vicinity and was informed by the approach controller that he thought the LARS controller was aware, and transferred him. The LARS controller stated that she was working traffic in that vicinity but did not have any solid radar contacts, only intermittent radar contacts. He then called and informed the Yeovilton Radar Supervisor of the incident and the pilot's intention to file an Airprox.

He perceived the severity of the incident as 'Low'.

## Factual Background

The weather at Yeovilton was recorded as follows:

METAR EGDY 141450Z 15010KT 9999 FEW040 SCT250 24/13 Q1015 BLU NOSIG

## Analysis and Investigation

### UKAB Secretariat

The Wildcat and TB10 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 Wildcat pilot was required to give way to the TB10<sup>2</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>3</sup>.

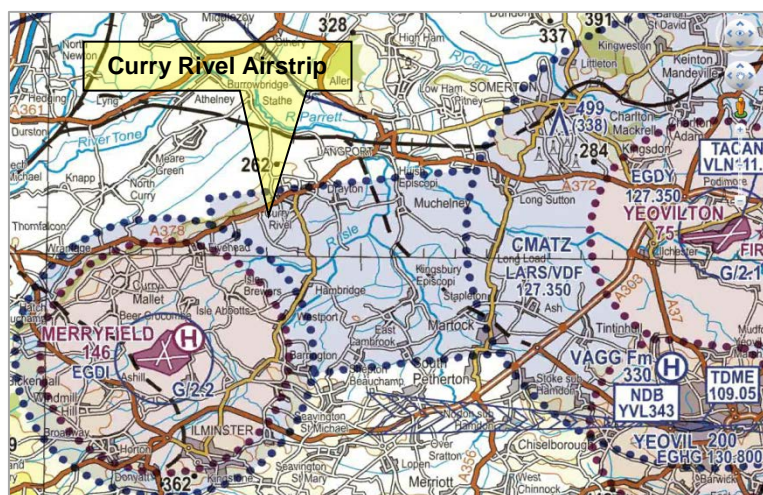


Figure 1: Merryfield and Yeovilton Area Chart

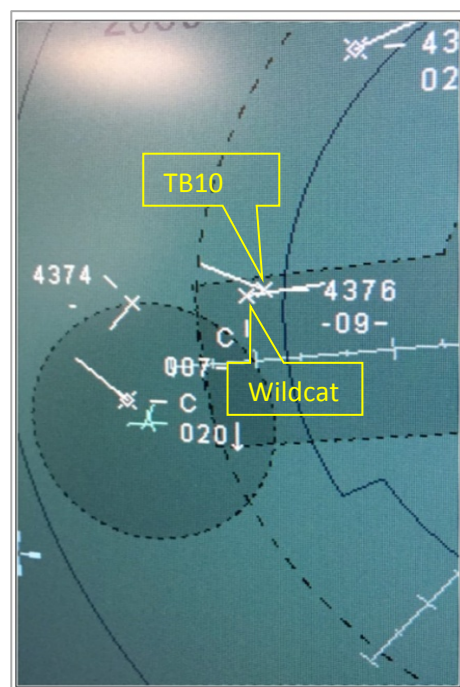


Figure 2: Yeovilton Radar Screenshot

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

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

<sup>3</sup> SERA.3225 Operation on and in the Vicinity of an Aerodrome.

## Comments

### Navy HQ

Merryfield is a satellite airfield of RNAS Yeovilton. As established by means of local investigation at RNAS Yeovilton by ATC staff, the TB10 pilot had clearly spoken with Yeovilton LARS and established his intentions. Unfortunately, the controller did not recognise the name of the airstrip, or, more importantly, the relative proximity to the Yeovilton low-level VFR helo routes, and therefore did not inform anybody else of that activity.

This incident has raised a number of important lessons within ATC at RNAS Yeovilton and resulted in a number of recommendations that have already been implemented. The LARS controller concerned has also undergone a standards check. A refresh of local area knowledge for controllers has been completed in the form of a review of ATC ground school and the issue of relevant ATC standards bulletins regarding routine local area activity and the potential impact on Yeovilton flying operations. Other initiatives include annotating the radar display with the position of Curry Rivel and changing the mandatory aircrew brief for wider aircrew education. Not least of all, a revision of the processes for the Curry Rivel GA community to inform RNAS Yeovilton of their activities is ongoing with all stakeholders thoroughly engaged.

## Summary

An Airprox was reported when a Wildcat and a TB10 flew into proximity at 1513 on Wednesday 14<sup>th</sup> June 2017. Both pilots were operating under VFR in VMC, the Wildcat pilot in receipt of a Basic Service from Merryfield and the TB10 pilot in receipt of a Basic Service from Yeovilton.

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

Information available consisted of reports from the pilots of both aircraft, transcripts of the relevant RT frequencies, reports from the air traffic controllers involved and reports from the appropriate ATC and operating authorities.

The Board were disappointed that the Yeovilton LARS controller had not submitted a report because that denied them the ability to understand the background and human factors issues behind the incident from her perspective. The RN member noted the omission and commented that the local investigation procedures at RNAS Yeovilton were in the process of being reviewed to make them more robust. The RN member then went on to brief the Board on the outcome of the local investigation as far as it went, and confirmed to them that it had concluded that the LARS controller should have relayed the status of Curry Rivel to the Merryfield controller once informed by the TB10 pilot; it had been the omission of this essential liaison function that had resulted in the relevant Traffic Information not being passed to the Wildcat pilot by Merryfield. The RN member commented that, to the best of his knowledge, incidents involving Curry Rivel and the Helicopter transit route had not occurred before, but this had served as a learning point for Yeovilton. The Board were heartened to hear that, as a result, ATC and pilot local instructions had been amended to include the implications of aircraft operating out of Curry Rivel on the transit route; the location of the Curry Rivel airstrip has been marked on the radar display; and the subsequent actions required to deconflict the aircraft incorporated into local instructions. The RN member highlighted that the local incident investigation should have been initially categorised as an Occurrence Safety Investigation (OSI) but had incorrectly been instigated as only a more limited Local Investigation (LI) which had not included the essential inter-agency details that an OSI provides (essentially, the LI had only reviewed the Flight Crew perspective and had not included the actions or implications associated with Yeovilton and Merryfield ATC). A subsequent OSI had corrected this error in the investigation process and this learning point had also been incorporated into the Yeovilton post incident report.

The Board then considered the actions of the TB10 pilot. They noted that Curry Rivel airstrip is located under the Yeovilton MATZ stub, and that the TB10 pilot had endeavoured to inform Yeovilton of the status of the airstrip and his flight intentions by contacting Yeovilton LARS. By also keeping

the height of his visual circuits below the lower level of the stub, the Board agreed that there was little more that the TB10 pilot could have done, and commended him for his pro-active approach. Some members wondered whether the TB10 pilot could have called Merryfield ATC directly, but it was pointed out by the RN member that it is Yeovilton ATC and not Merryfield that monitor the Merryfield frequency unless Merryfield are specifically requested to listen out. This was presumably why the TB10 pilot had in the past been discouraged from calling Merryfield given that he would likely be talking to Yeovilton anyway. Notwithstanding that the Yeovilton LARS controller should have passed on the TB10 information, Members commented that there would be benefit in ensuring that the published Merryfield frequency was monitored by Merryfield when the airfield is active rather than rely on liaison between the 2 units because GA aircraft in the vicinity of Merryfield might not think to call Yeovilton to gain information about Merryfield's status. Ultimately, the Board agreed that the TB10 pilot had seen the Wildcat in plenty of time to determine that his safest course of action was to continue his approach and descend to land at Curry Rivel, and the Board again commended him for maintaining a robust lookout at a critical stage of flight where it would be easy to focus solely on achieving landing parameters.

The Board then turned to the actions of the Wildcat pilot. They noted that the Yeovilton local area pilot brief had not at the time included any information about Curry Rivel, and members wondered whether the Wildcat pilot would have been aware of the location of the airstrip on his planned route. Had he been aware, he could have ensured his tactical planning took this into account, and could have changed his route to ensure he remained outside the pattern of traffic at Curry Rivel. Notwithstanding, the Wildcat pilot was operating in see-and-avoid Class G airspace which relied on him maintaining a robust lookout for other aircraft. In this respect, it was clear to the Board that he had seen the TB10 late, after the TB10 pilot had started his descent to land. The Board were surprised that the Wildcat pilot did not receive any TAS indications alerting him to the presence of the TB10, which should have registered on the Wildcat TAS because it was transponding with Mode S. Some members speculated that aerial blanking may have been a factor as the TB10 descended to land, but the Board could come to no definitive explanation.

The Board then looked at the cause and risk of the Airprox. They agreed that two main factors had contributed to the Airprox by limiting the Wildcat pilot's situational awareness and tactical planning. The first being that although the TB10 pilot had contacted Yeovilton LARS, the LARS controller had not informed Merryfield and hence they had not been able to inform the Wildcat pilot that the Curry Rivel circuit was active. The second contributory factor was that the Curry Rivel airstrip was not included in the Merryfield-Yeovilton transit route procedure within the Yeovilton briefing materials and operational documentation. Notwithstanding these contributory factors, the Board agreed that, ultimately, it was for the Wildcat pilot to avoid the TB10 that was making his approach to land and that the cause of the incident was that the Wildcat pilot had flown through the Curry Rivel circuit and into conflict with the TB10. The Board then turned to the risk. They noted that the TB10 pilot was always visual with the Wildcat and was content that by continuing his approach to land there would be sufficient separation to avoid any risk of collision; accordingly, the degree of risk was assessed as Category C, safety had been degraded but there was no risk of collision.

### **PART C: ASSESSMENT OF CAUSE AND RISK**

Cause: The Wildcat pilot flew through the Curry Rivel circuit and into conflict with the TB10.

Contributory Factor(s):

1. Yeovilton ATC did not inform Merryfield ATC or the Wildcat pilot that the Curry Rivel visual circuit was active.
2. The Curry Rivel airstrip was not included in the Merryfield-Yeovilton transit route procedure.

Degree of Risk: C.

## Safety Barrier Assessment<sup>4</sup>

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

### ANSP

**Regulations, Processes, Procedures & Compliance** was assessed as **partially effective** because although Curry Rivel should be known to controllers as an airfield beneath the helicopter route between Merryfield and Yeovilton, it was not marked on the radar map nor subject to a local agreement between all involved parties.

**Situational Awareness & Action** was assessed as **ineffective** because the LARS controller had full information on the TB10 pilot's intentions, she did not pass this information on to the Merryfield controller, which would have enabled him to pass the relevant information to the Wildcat pilot regarding the TB10 on his transit route.

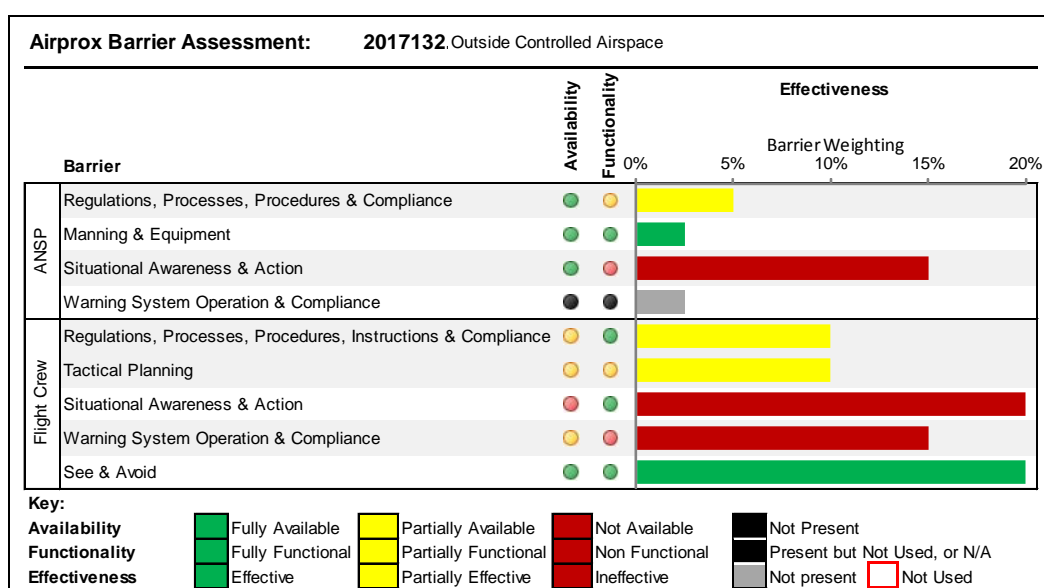
### Flight Crew

**Regulations, Processes, Procedures, Instructions & Compliance** was assessed as **partially effective** because although Curry Rivel was likely known to some local Wildcat pilots as an airstrip beneath the helicopter route between Merryfield and Yeovilton, it was not part of the local area brief to crews operating to and from Yeovilton.

**Tactical Planning** was assessed as **partially effective** because the location and type of activity of Curry Rivel airfield was not specifically available to the Wildcat pilot within the Yeovilton local operations pilot briefing and, because ATC did not provide the information about the TB10 to him, he could not change his airborne plan to take it into account.

**Situational Awareness & Action** was assessed as **ineffective** because the Wildcat pilot had no SA on the TB10 as a result of the LARS controller not liaising with the Merryfield controller.

**Warning System Operation and Compliance** was assessed as **ineffective** because although the Wildcat was equipped with TAS and the TB10 was transponding, the Wildcat pilot received no TAS indications.



<sup>4</sup> The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).