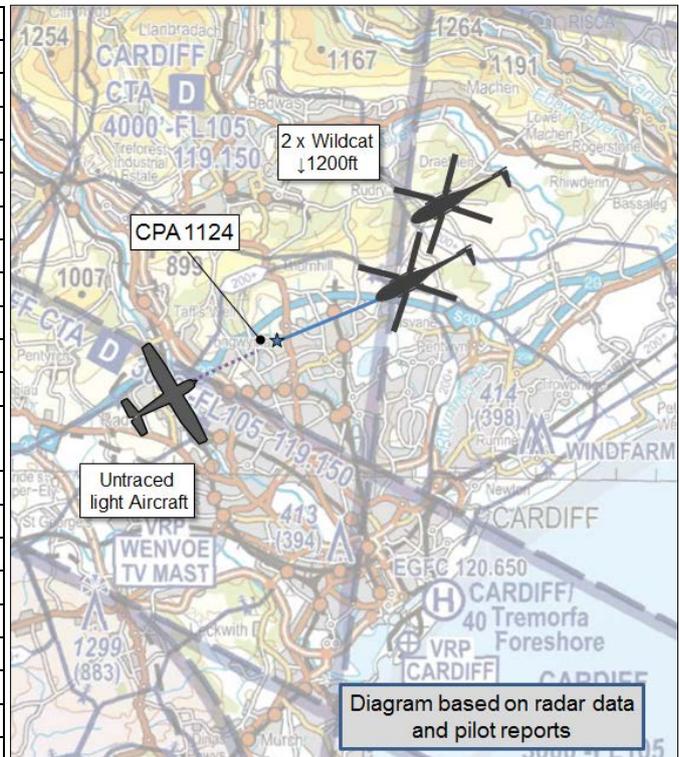


**AIRPROX REPORT No 2017075**

Date: 06 Mar 2017 Time: 1124Z Position: 5132N 00312W Location: 10nm NE Cardiff Airport

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

Recorded	Aircraft 1	Aircraft 2
Aircraft	Wildcat	Unknown
Operator	RN	Unknown
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	
Service	Basic	
Provider	Cardiff	
Altitude/FL		
Transponder	A, C	
<b>Reported</b>		
Colours	Grey	White
Lighting	HISL, Nav, Landing	
Conditions	VMC	
Visibility	10km	
Altitude/FL	1200ft	
Altimeter	RPS	
Heading	270°	
Speed	120kt	
ACAS/TAS	TAS	
Alert	Unknown	
<b>Separation</b>		
Reported	200ft V/250m H	
Recorded		NK



**THE WILDCAT PILOT** reports that whilst heading westbound to the north of Cardiff at 1500ft in a formation of 2 Wildcats, they were informed by Cardiff ATC of civilian traffic southwest of their position by 8nm and 400ft below. Due to inclement weather, the formation descended to 1200ft amsl to remain clear of cloud. A few minutes later, the civilian aircraft was seen by the handling pilot of the lead aircraft approaching the formation head-on approx 100ft above them. The lead aircraft elected to descend to increase separation and informed the wing-man, who turned right. The civilian aircraft flew between the two aircraft, separated laterally by 500-1000m, about 200ft above. Although at the time the crew didn't feel an Airprox had occurred and therefore did not report one to ATC, it was decided retrospectively to submit one to raise the awareness of the incident and learn lessons from it.

He assessed the risk of collision as 'Medium'.

**THE LIGHT AIRCRAFT PILOT** could not be traced.

**THE CARDIFF CONTROLLER** reports that he was not informed about the Airprox until 5<sup>th</sup> May, by which time he had no recollection of the incident.

**Factual Background**

The weather at Cardiff was recorded as follows:

METAR EGFF 061120Z 29014KT 9999 -RA SCT008 BKN015 07/05 Q1005=

## Analysis and Investigation

The Airprox did not show on the NATS area radars, the light aircraft could not be seen on radar at all and consequently could not be traced. The Wildcat formation could be seen tracking towards Cardiff, and starting the descent to 1200ft as described by the pilot, (see Figure 1), shortly afterwards they faded from radar.

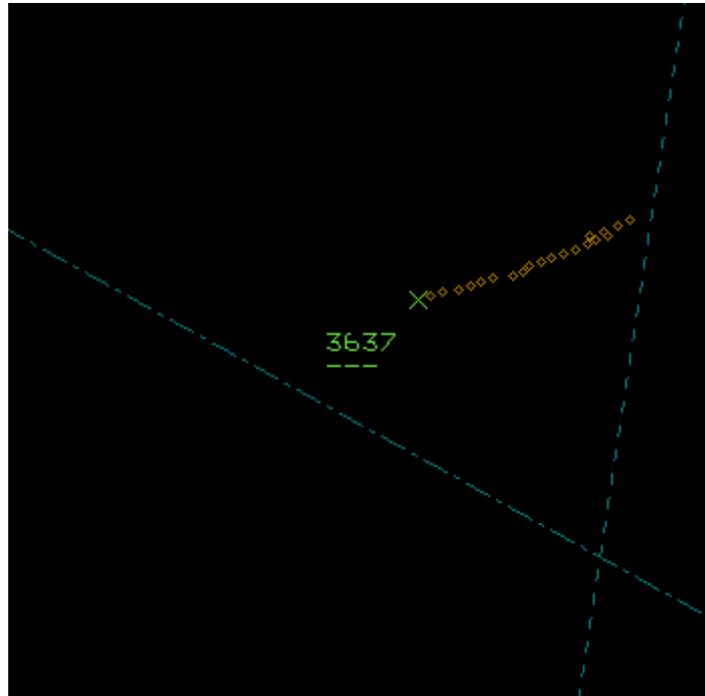


Figure 1: 1123:59

## NATS Occurrence Investigation

Cardiff received notification of the Airprox on 5<sup>th</sup> May, according to the NATS area radar recordings the Wildcat formation was receiving a Basic Service from Cardiff at the time. In interview the Cardiff controller said that he could not remember the incident and the pilot had not reported it at the time. The Cardiff RT and Radar recordings were not available because they are only kept for 40 days, and notification was outside this time. The flight strips in the archive did not indicate an aircraft that could have been a confliction with the Wildcat, therefore it is assumed that the conflicting aircraft was not receiving a service from Cardiff radar.

## UKAB Secretariat

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<sup>1</sup>. If the incident geometry is considered as head-on or nearly so then both pilots were required to turn to the right<sup>2</sup>.

## Comments

### Navy HQ

The Wildcat formation were in receipt of a Basic Service and therefore any Traffic Information passed would have been generic for the most part, unless the controller had seen a specific conflict developing. The hazards of operating in Class G airspace are well known and the principles of maintaining a good lookout were employed to best effect in this instance.

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

<sup>2</sup> SERA.3210 Right-of-way (c)(1) Approaching head-on.

## Summary

An Airprox was reported when a Wildcat and an unknown aircraft flew into proximity at 1120 on Monday 6<sup>th</sup> March 2017. The Wildcat pilot was operating under VFR in VMC, and in receipt of a Basic Service from Cardiff. The light aircraft pilot 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, and reports from the appropriate ATC and operating authorities.

The Board first looked at the actions of the Wildcat pilots. At first members wondered why they were transiting under a Basic Service when the cloud base was low and the weather less than ideal. RAF members noted that their crews were now instructed to ask for a Traffic Service whenever they were in a transit but it was pointed out that Cardiff may not have been able to provide a radar service in the area at that height depending on the base altitude of their radar vector chart. [UKAB note: subsequently, Cardiff ATC have confirmed that they have good radar cover and that, subject to workload at the time, a limited Traffic Service could have been provided in this area]. Overall, members thought it was a timely reminder to all pilots that when transiting in poor weather conditions it is advisable to request a suitable radar service whenever possible. Notwithstanding, and despite being only under a Basic Service, the Wildcat pilots had received good Traffic Information from Cardiff, giving a range and height of conflicting traffic. Some members wondered why, having been given Traffic Information on an aircraft ahead and below them, the crews still descended down into conflict with this known traffic. Others felt that by descending to remain clear of cloud they were at least attempting to ensure that they remained VMC and able to see the light aircraft as soon as practicable. That being said, they agreed that it may have been advisable to have altered track earlier in order to generate a measure of lateral separation as well. Once visual with the light aircraft, members noted that the crew were content with the separation that had been achieved as it transited above and between the formation.

A discussion followed about why this incident had not been reported at the time, and whether it should have been classified as an Airprox at all given that the Wildcat crew were content with their separation. Members agreed that the incident had met the criteria for reporting an Airprox, and the Board highlighted the difficulties that were caused if incidents were raised retrospectively, weeks after the event. As had been the case in this incident, the time elapsed since the Airprox meant that vital radar and RT data was lost, the controller could not remember the incident, and the light aircraft pilot could not be traced, leaving a number of questions unanswered as to the other pilot's perspective. As a result, members wished to remind all aircrew the importance of reporting such events at the time, over the RT, or as soon as possible after landing.

In looking at the cause of the Airprox some members thought that the Wildcat pilots had not acted appropriately on the TI that they had been given on the other aircraft because they had descended towards it; they argued that the Wildcat pilots had effectively flown into conflict with the other aircraft. Others argued that they had needed to descend to remain VMC and, in doing so, they had ultimately seen the other aircraft as soon as possible and had taken appropriate avoiding action. In the end, the latter view prevailed, and the Board agreed that the incident was best described as a conflict in Class G airspace, resolved by the Wildcat pilots. Some members also thought that the reported separation, head on, of 200ft V and 250m H was quite close given the prevailing weather conditions, and they argued that safety had been much reduced (Category B). However, the majority view was that timely and effective action had been taken and so the risk was assessed as Category C.

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

Cause: A conflict in Class G resolved by the Wildcat 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:

**ANSP**

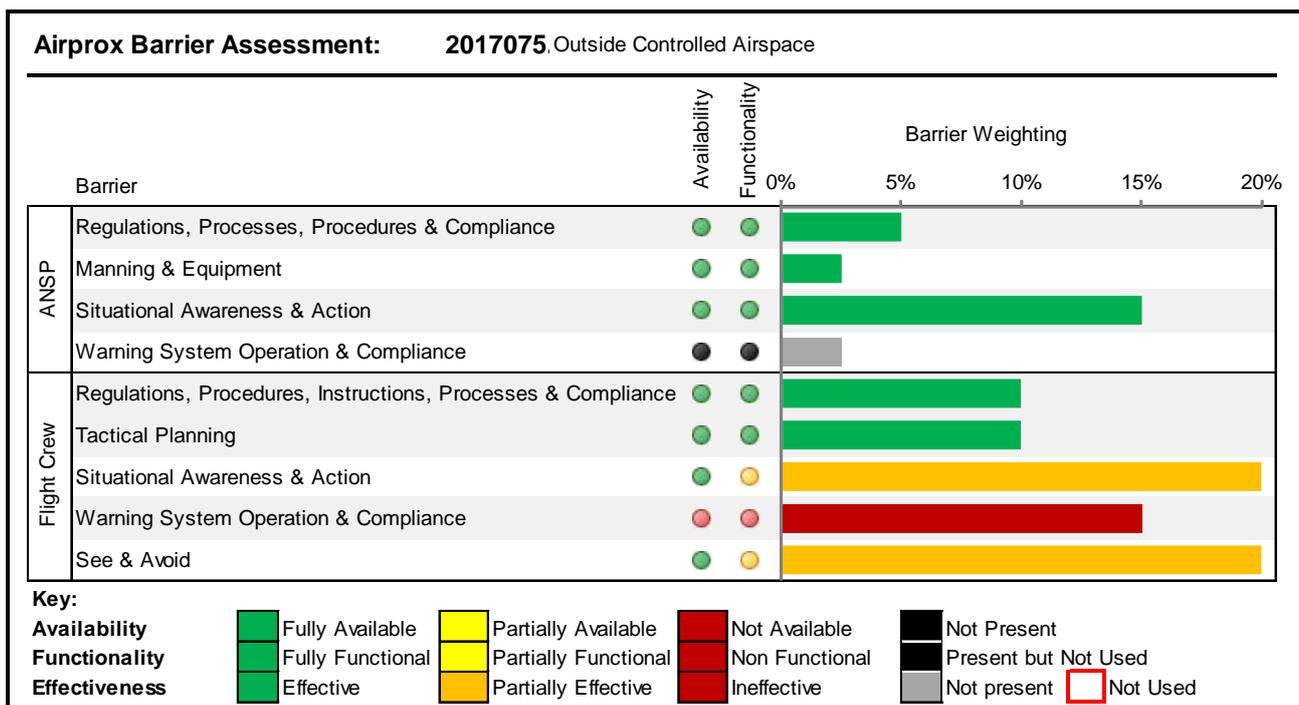
**Situational Awareness & Action** was assessed as **effective** because the controller gave relevant Traffic Information to the Wildcats despite them being under only a Basic Service.

**Flight Crew**

**Situational Awareness & Action** was assessed as **partially effective** because although the Wildcat pilot was given Traffic Information he didn't alter his course in any way to keep clear of the light aircraft prior to his taking avoiding action.

**Warning System Operation and Compliance** was assessed as **ineffective** because the Wildcats' CWS did not alert, implying that the other aircraft was not transponder equipped.

**See and Avoid** was assessed as **partially effective** because although the Wildcat pilot saw the light aircraft in time to take avoiding action, this was later than desirable; and the fact that the other aircraft flew between the two formation aircraft was also not ideal.



<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](#).