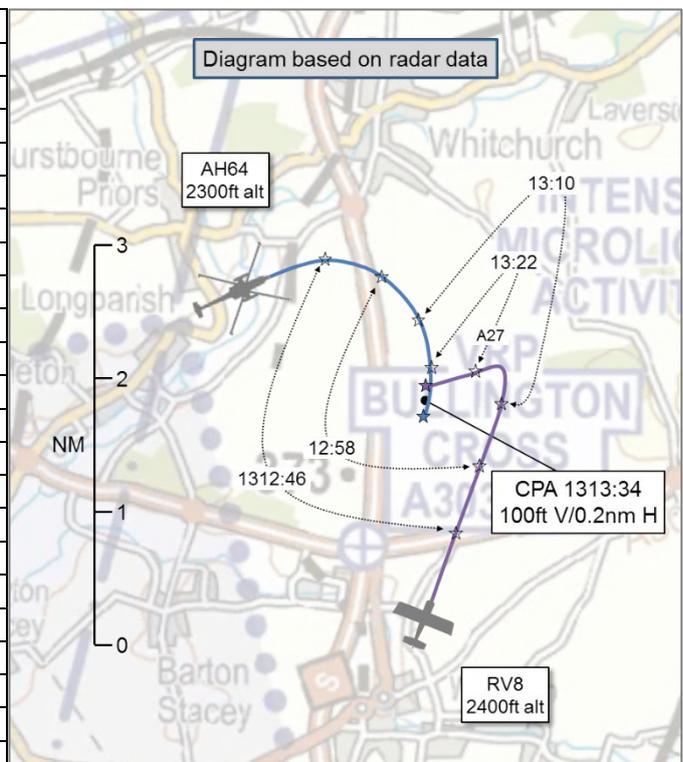


AIRPROX REPORT No 2019156

Date: 21 Jun 2019 Time: 1314Z Position: 5112N 00119W Location: ivo Bullington Cross VRP

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	AH64 Apache	RV8
Operator	HQ AAC	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Traffic	None
Provider	Middle Wallop	N/A
Altitude/FL	2300ft	2400ft
Transponder	A, C, S	A, C, S
Reported		
Colours	Green	Purple, white
Lighting	HISL, nav, landing	HISL
Conditions	VMC	VMC
Visibility	40km	NK
Altitude/FL	2000ft	2000ft
Altimeter	QFE (1009hPa)	NK
Heading	200°	200°
Speed	110kt	150kt
ACAS/TAS	Not fitted	Not fitted
Separation		
Reported	100ft V/200m H	0ft V/250m H
Recorded	1000ft V/0.2nm (~370m) H	



THE AH64 PILOT reports that he was in the radar pattern for an SRA when approach called traffic to the southeast. A fixed-wing aircraft was spotted conducting aerobatic manoeuvres east of the A34 with the AH64 west. The fixed-wing cockpit was orientated towards the AH64 and appeared to roll wings-level. Once wings-level, passing behind, it appeared to waggle its wings, which could have been an indication it had seen them. The AH64 pilot did not alter course as they saw the fixed-wing aircraft pass behind. It then did a very dynamic manoeuvre which he perceived as a 'tip in' on the AH64 and got within a couple of hundred meters before banking behind again. If the fixed-wing had maintained its track when it turned, it was on a collision course. An Airprox was reported to ATC and the sortie continued.

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

THE RV8 PILOT reports seeing an AH64 helicopter 5nm to the north. As it passed behind to his left he turned left through 360°. No avoiding action was required.

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

THE MIDDLE WALLOP CONTROLLER reports that he was operating under a medium-to-low workload. The AH64 was given a base leg turn of 190° and cardinal-point-based Traffic Information on a 7000 squawk. Whilst in the turn, the AH64 pilot reported visual with the traffic. A frequency change to Wallop Talkdown was instructed; the AH64 pilot responded that they wished to remain on the frequency. A heading to the approach path of 250° was given to protect against Solent airspace infringement and the AH64 pilot was asked if he was happy to continue with the approach. The AH64 pilot then announced he wished to file an Airprox and provided the necessary details. In addition, the AH64 pilot reported that the conflicting aircraft was performing aerobatics, rocked its wings at them, then veered towards and was unnecessarily close. On request, a description of the aircraft was given.

THE MIDDLE WALLOP SUPERVISOR reports that the controller passed Traffic Information on the 7000 squawk and the AH64 pilot reported visual with the aircraft. The controller then instructed the pilot to change to the Talkdown frequency but the pilot requested to remain on Approach and then reported the Airprox. The pilot was in receipt of a Traffic Service and therefore responsible for collision avoidance. The pilot was flying under VFR and in Class G airspace. It is known that Bullington Cross is a well-used navigation point and VRP for Southampton Airport. There is nothing more the controller could have done to prevent the Airprox.

Factual Background

The weather at Middle Wallop was recorded as follows:

METAR EGVP 211322Z 25006KT CAVOK 18/07 Q1019 NOSIG RMK BLU BLU=

Analysis and Investigation

UKAB Secretariat

The AH64 and RV8 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard¹.

Comments

JHC

The AH was carrying out radar vectoring prior to conducting an SRA when they were given TI from ATC on a 7000 Squawking traffic. The pilot reported visual and ATC prompted a frequency change to Talkdown. The pilot commendably elected to remain on frequency as he observed the traffic conducting aerobatics and coming into a possible confliction. The crew observed the fixed-wing conduct a wing wave which the pilot suggested could have been an indication that the FW was visual but then flew in a manner which could be considered threatening to safe separation. The civilian aircraft was squawking but the military investigation could not determine if it was on frequency which could have proved useful. In this case the ATC barrier provided an adequate 'cue' so the AH was visual at all times.

Summary

An Airprox was reported when an AH64 and an RV8 flew into proximity near Bullington Cross at 1314Z on Friday 21st June 2019. Both pilots were operating under VFR in VMC, the AH64 pilot in receipt of a Traffic Service from Middle Wallop and the RV8 pilot not in receipt of a FIS.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings, a report from the air traffic controller involved and comment from the appropriate operating authority. 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.

Members quickly agreed that the RV8 pilot's actions had not been well considered (**CF1**) given that he had been visual with the AH64 for some considerable time but had still manoeuvred into sufficiently close proximity as to have caused the Apache pilot concern (**CF2**). Members discussed the RV8 pilot's application of Threat & Error Management (TEM) and risk perception, and agreed that even if the RV8 pilot had initially misjudged his 360° turn once he had flown past the AH64, he had had the opportunity to roll out well before he came into conflict. GA members commented that, ultimately, flight into closer proximity than necessary with other aircraft was not advisable, not least because the other pilot might

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

not have obtained visual contact and could unknowingly and unexpectedly manoeuvred at close range such that avoiding action was not possible.

In considering the risk, the Board noted that, in the end, each pilot was in visual contact with the other aircraft and that the RV8 pilot would presumably not have continued his flightpath to the point where there was a risk of collision. That being said, members also agreed that safety had been reduced due to his actions, and that the event could not be classified as one where normal procedures, safety standards and parameters had pertained; risk Category C.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

2019156			
CF	Factor	Description	Amplification
Flight Elements			
• Tactical Planning and Execution			
1	Human Factors	• Insufficient Decision/Plan	Inadequate plan adaption
• See and Avoid			
2	Human Factors	• Lack of Individual Risk Perception	Pilot flew close enough to cause the other pilot concern

Degree of Risk: C.

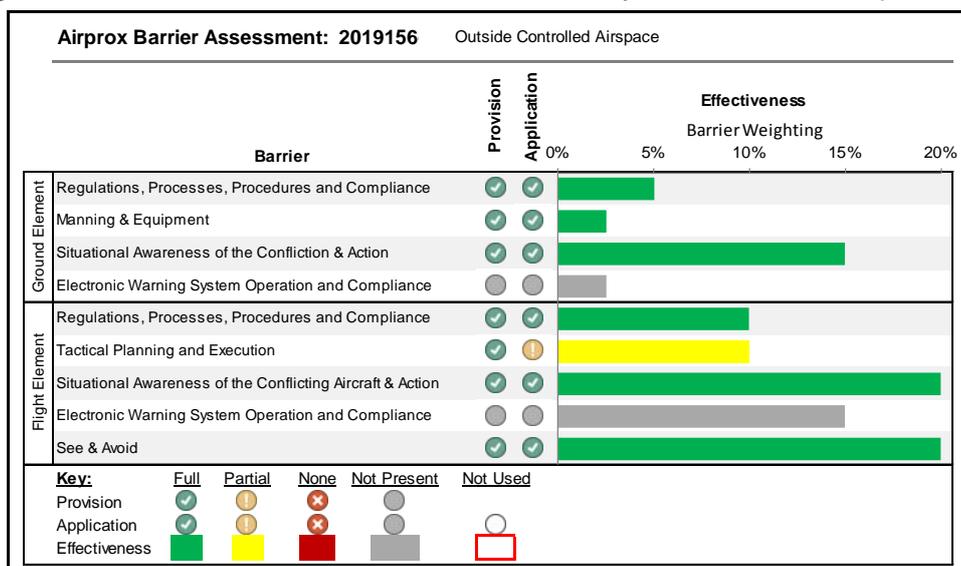
Recommendation: Nil.

Safety Barrier Assessment²

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

Flight Elements:

Tactical Planning and Execution was assessed as **partially effective** because the RV8 pilot flew close enough to and in such a manner that he unnecessarily caused the AH64 pilot concern.



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