AIRPROX REPORT No 2024161

Date: 14 Jul 2024 Time: ~1233Z Position: 5059N 00211W Location: 1.3NM WNW Compton Abbas

Recorded	Aircraft 1	Aircraft 2
Aircraft	ACA Scout	RV8
Operator	Civ FW	Civ FW
Airspace	Compton Abbas ATZ	Compton Abbas ATZ
Class	G	G
Rules	VFR	VFR
Service	AGCS	AGCS
Provider	Compton Radio	Compton Radio
Altitude/FL	NK	NK
Transponder	A, C, S	A, C, S
Reported		
Colours	Strobe	Nav, strobe
Lighting	Yellow	Blue
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	1300ft	1500ft
Altimeter	QNH	QNH
Heading	NK	240°
Speed	70kt	120kt
ACAS/TAS	Not fitted	Not fitted
Separation at CPA		
Reported	10ft V/25m H	500ft V/300m H
Recorded	N	K

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE ACA SCOUT PILOT reports that they lined up RW26 for departure. At this time they noticed the RV8 [pilot] call up and declare that they were lining up RW26 after them. They had departed RW26 and were in the climb-out (northwest) towards Melbury Hill, at an estimated 1300ft QNH. Suddenly the RV8 came past them about 50-100ft to their left and slightly below, also in the climb. They were not expecting to see this, the aircraft was probably doing 30-40kt more than they were. They stated on the radio that they had been passed by another aircraft quite close. The other aircraft [pilot] replied, something like, "I had you in sight and passed you on your left". They replied "well you could have told me you were coming". They considered [the other pilot's] flying action, on this occasion, dangerous. [Stating that] no consideration was given to their aircraft or their potential actions. [They questioned] what if they were to practice an EFATO? The natural reaction would be for the student to revert to glide and aim for a suitable landing area. In this case that would have been a descent to the left, into the path of the overtaking RV8. If the RV8 pilot had declared their intention to overtake, they would have made an allowance and have been prepared for the manoeuvre. In their opinion there was no reason for the RV8 pilot to make what they called a "zoom pass", and that it was unnecessary and lacked airmanship, apart from disregard for all the rules of circuit behaviour. Reasonably often they practice EFATO with their students, and they were thankful on this occasion they did not.

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

THE RV8 PILOT reports that they were advised by Compton Abbas airfield what route to take prior to departure, turn right as soon as possible after take-off, head towards the left-hand side of the hill. They were aware that there was a noise sensitive area to the left of this hill, so kept this on their left. The other aircraft took off ahead of them from Compton Abbas. They were aware that it was slower than their aircraft so allowed some time before they took off. They had the other aircraft in sight at all times and passed well to the left-hand side, aware that they could not go much further left to avoid encroaching the noise sensitive area. The RV8 was considerably quicker than the other aircraft but they considered that they gave it plenty of room. In hindsight they thought maybe they should have advised

the pilot that they were passing on their left-hand side but as they had just taken off and were concentrating on taking the best route between them and the noise sensitive area, they did not.

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

THE COMPTON AIR/GROUND OPERATOR reports that, in their opinion, the RV8 [pilot] should have delayed their take-off further (in order to increase separation) and, though it did pass closer than optimum to the [ACA] Scout, the separation was not reduced enough to pose an immediate flight safety risk.

Factual Background

The weather at Bournemouth was recorded as follows:

METAR EGHH 141220Z 18006KT 150V210 9999 FEW026 18/13 Q1012

Analysis and Investigation

UKAB Secretariat

An analysis of the NATS radar replay was undertaken. The ACA Scout was not identified on radar in the vicinity of the reported area of the Airprox and the RV8 was positively identified using Mode S data, visible from 1233:52. This was the closest point to the reported location of the Airprox at 1.4NM west-northwest of it. However, the RV8 was already at 2100ft at this point, having passed the reported location of the Airprox and with no sign of the ACA Scout.

A further analysis of ADS-B data was undertaken and the RV8 first became visible at 1234:02 at 2200ft and 1.6NM west-northwest from Melbury Hill. The ACA Scout was not seen on any ADS-B-derived sources.

The ACA Scout 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 hazard.¹ If the incident geometry is considered as overtaking then the ACA Scout pilot had right of way and the RV8 pilot was required to keep out of the way of the other aircraft by altering course to the right. An aircraft that is being overtaken has the right-of-way and the overtaking aircraft, whether climbing, descending or in horizontal flight, shall keep out of the way of the other aircraft by altering its heading to the right, and no subsequent change in the relative positions of the two aircraft shall absolve the overtaking aircraft from this obligation until it is entirely past and clear.²

Summary

An Airprox was reported when an ACA Scout and an RV8 flew into proximity at Compton Abbas at approximately 1233Z on Sunday 14th July 2024. Both pilots were operating under VFR in VMC, and both were in receipt of an AGCS from Compton Radio.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings (although the radar data was immediately after the time of the Airprox), ADS-B-derived data and a report from the air ground operator involved. 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.

¹ (UK) SERA.3205 Proximity.

² (UK) SERA.3210 Right-of-way (c)(3) Overtaking.

The Board first considered the actions of the Compton AGO and agreed that their input and observation had been useful to the Board's discussions, and that the ground element of this Airprox had not been a factor.

The Board then considered the actions of the ACA Scout pilot who had been aware of the RV8 lining up on the runway behind them, but had not known that the RV8 was going to be departing quite as soon as they had, nor passing down their left-hand side, leaving the pilot with only generic situational awareness of the position of the RV8. Members noted that the ACA Scout pilot's view of the RV8 would have initially been obscured, with the RV8 having been behind and below them. The Board acknowledged that this had caused the ACA Scout pilot to have been concerned by the appearance and proximity of the RV8 as it had passed them on the left.

Turning their attention to the actions of the RV8 pilot, the Board was concerned that the pilot had not waited a little longer before taking-off behind the ACA Scout, and considered that when they had started their ground roll they had not communicated their intentions to either the AGO or shortly after to the aircraft ahead that they would be passing them on the left. On this latter point, the Board also considered that had this been the RV8 pilot's intentions, then they should also have planned to pass the ACA Scout on the right, in accordance with (UK)SERA.3210. Furthermore, members considered that had the RV8 pilot not intended to overtake the ACA Scout then the aircraft's capabilities were such that the pilot could have reduced the climb-out speed by reducing the power setting. Overall, the Board agreed that the RV8 pilot had not taken into account the 'what if' scenarios of the aircraft ahead needing to manoeuvre for either a real or practise EFATO, for example, and had subsequently flown close enough to the ACA Scout to cause its pilot concern.

The Board noted that their deliberations had been based mainly with consideration to the pilots' and AGO's reports and that there had been limited information available to them to enable a sound assessment of risk to be made. Therefore, a Risk Category D was assigned to this event. The Board also agreed that the following factors had been contributory to the Airprox:

CF1. The RV8 pilot had not communicated their intentions to the AGO or ACA Scout pilot.

CF2. The RV8 pilot had incorrectly executed an overtaking manoeuvre on the left instead of the right.

CF3. The ACA Scout pilot had only had generic situational awareness of the position of the RV8.

CF4. The RV8 pilot flew close enough to the ACA Scout to cause concern.

CF5. The ACA Scout pilot had been concerned by the proximity of the RV8.

CF6. The ACA Scout pilot's view of the RV8 had been obscured by their relative positions.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2024161							
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification				
	Flight Elements							
	Tactical Planning and Execution							
1	Human Factors	Accuracy of Communication	Events involving flight crew using inaccurate communication - wrong or incomplete information provided	Ineffective communication of intentions				
2	Human Factors	Action Performed Events involving flight crew performing the selected action incorrectly		Incorrect or ineffective execution				
	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	Lack of Individual Risk Perception	Events involving flight crew not fully appreciating the risk of a particular course of action	Pilot flew close enough to cause concern			
5	Human Factors	• Perception of Visual Information	Events involving flight crew incorrectly perceiving a situation visually and then taking the wrong course of action or path of movement	Pilot was concerned by the proximity of the other aircraft			
6	Contextual • Visual Impairment		Events involving impairment due to an inability to see properly	One or both aircraft were obscured from the other			

Degree of Risk:

Safety Barrier Assessment³

D.

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 Air Ground Operator was not required to sequence the aircraft in the ATZ.

Flight Elements:

Tactical Planning and Execution was assessed as **ineffective** because the RV8 pilot had not effectively communicated their intentions to the pilot of the ACA Scout and, as they had overtaken the ACA Scout, they should have been be positioned on the right side of the Scout.

Situational Awareness of the Conflicting Aircraft and Action were assessed as partially effective because the pilot of the ACA Scout had only had generic situational awareness of the position of the RV8.

³ The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the <u>UKAB Website</u>.

	Airprox Barrier Assessment: 2024161 Ou	utside	Controlle	ed Airspace			
	Barrier	Provision	Application %0	5%	Effectiveness Barrier Weighting 10%	15%	20%
Ground Element	Regulations, Processes, Procedures and Compliance	\bigcirc	0				
	Manning & Equipment	Ø	0				
	Situational Awareness of the Confliction & Action	\bigcirc	\circ				
	Electronic Warning System Operation and Compliance						
Flight Element	Regulations, Processes, Procedures and Compliance						
	Tactical Planning and Execution		8				
	Situational Awareness of the Conflicting Aircraft & Action						
Flich	Electronic Warning System Operation and Compliance	\bigcirc					
	See & Avoid						
	Key: Full Partial None Not Present/No Provision Image: Constraint of the second s	o <u>t Ass</u>))	<u>essable</u>	Not Used			