## AIRPROX REPORT No 2018191

Date: 24 Jul 2018 Time: 1424Z Position: 5122N 00114W Location: 2nm WSW Brimpton

Recorded	Aircraft 1	Aircraft 2	lotes 3 & 4	
Aircraft	Tecnam Sierra	R66	Stanfore	Diagram based on radar data and pilot reports
perator	Civ FW	Civ Helo	Beedo	
irspace	London FIR	London FIR	th De Work	114.35 114.35 NORR
lass	G	G	stead	DME
ules	VFR	VFR	450 chieve	e Yattendore
ervice	Listening Out	Basic	FIRS Fm	Hernitage
rovider	Brimpton Radio	London	TIMA JOINT	S - C
		Information	Winterbourne	CPA 1424:35
ltitude/FL	1100ft alt	1000ft alt	C CORT	100ft V/0.1nm H
ransponder	A, C, S	A, C, S		
Reported			Speen	AND IN DATA CAR
Colours	White, Red, Blue	Red, Gold	NEWBURY	THATCHAM TO T
ighting	Strobe	Strobe		
Conditions	VMC	VMC	PAS AA	Greenham
'isibility	>10km	>10km	COMM	AM 2 210
	900ft	1000ft		
	QFE (1008hPa)	QNH	A Bread Newtown	Tecnam Sierra
5	100°	225°	See al	1100ft alt
	95kt	110kt	Highclore	R101/2 4
ACAS/TAS	PilotAware	Unknown	Castle Castle	530 Kingsclere
Alert	N/K	Unknown	worth Old Suire	hdere
Separation		857	1225 Wolvenon t	
Reported	<200ft V/<200m H	N/K		
Recorded	100ft V/0.1nm H			

## PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

**THE TECNAM SIERRA PILOT** reports that he was returning to Brimpton after a short local flight. He was descending over Greenham Common disused airfield to re-join the circuit at Brimpton, RW24RH, and looking out for the airfield and landmarks for the start of the downwind leg. When he looked up ahead he saw a light helicopter (possibly an R22 or R44) coming the opposite way slightly to his right at similar height or just below, and he estimated less than 1nm away. He immediately turned left and climbed to avoid the aircraft which passed below and to his right. He said that his PilotAware collision warning system was not set up for audio alerts, and he was looking outside at the time rather than at the display, although after the incident he didn't see the other aircraft on the display. He reported the incident to Farnborough by phone the following morning. In the light of this incident he is reviewing the way he re-joins the circuit at Brimpton because Greenham Common is a popular navigation landmark.

He assessed the risk of collision as 'High'.

THE R66 PILOT did not see the other aircraft.

## **Factual Background**

The weather at Odiham was recorded as follows:

METAR EGVO 241350Z 22013KT 9999 BKN048 SCT250 28/14 Q1014 BLU NOSIG

#### Analysis and Investigation

## **UKAB Secretariat**

The Tecnam Sierra and R66 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>. If the incident geometry is considered as converging then the R66 pilot was required to give way to the Tecnam Sierra<sup>3</sup>.

## Summary

An Airprox was reported when a Tecnam Sierra and an R66 flew into proximity at 1424 on Tuesday 24<sup>th</sup> July 2018. Both pilots were operating under VFR in VMC, the Tecnam Sierra pilot not in receipt of a Service and the R66 pilot in receipt of a Basic Service from London Information.

# PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from the pilots of both aircraft and radar photographs/video recordings.

The Board began by looking at the actions of the Tecnam pilot. Members noted that he was focused on looking down for geographical visual reference points prior to the Airprox, and that this had resulted in reduced lookout for other aircraft. As ever, there is a balance to be struck within the elements of the 'Aviate, Navigate, Communicate' mantra and members acknowledged the need to ensure an appropriate track was maintained to the downwind point. Notwithstanding, members opined that this incident again highlights the importance of pilots dividing their attention between tasks to ensure a robust lookout in the see-and-avoid environment. Members could not determine whether the PilotAware had alerted or not but commended the Tecnam pilot for its carriage and encouraged him to integrate the audio warning feature at the earliest opportunity so that he did not have to rely on referring only to its display.

The Board then turned to the actions of the R66 pilot. The helicopter members commented that the area around Brimpton was a busy piece of airspace and a known hotspot for transiting aircraft that requires pro-active lookout to avoid other aircraft. They also commented that, although the R66 pilot was entitled to be where he was, in their opinion, flying that close to Brimpton at circuit height was not best practice, especially without making a call on Brimpton's frequency. The Board agreed and decided that this was a contributory factor to the incident. Other members commented that the R66 pilot would also have been better served by seeking a Traffic Service from either Benson or Farnborough for his transit rather than calling London Information, who operate only a Basic Service without radar and can only provide generic Traffic Information about other aircraft that they are in contact with.

The Board then considered the cause and risk of the Airprox. Notwithstanding his task focus on navigation, members agreed that the Tecnam pilot had seen the R66 early enough to carry out timely avoiding action. Noting that the R66 pilot did not see the Tecnam, the Board therefore concluded that the incident was best described as a conflict in Class G resolved by the Tecnam pilot. Turning to the risk, the Board agreed that because the Tecnam pilot had seen the R66 early enough to make a timely and effective manoeuvre, although safety had been degraded there had been no risk of collision; risk Category C.

<sup>&</sup>lt;sup>1</sup> SERA.3205 Proximity.

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

<sup>&</sup>lt;sup>3</sup> SERA.3210 Right-of-way (c)(2) Converging.

# PART C: ASSESSMENT OF CAUSE AND RISK

<u>Cause</u>: A conflict in Class G resolved by the Tecnam pilot.

Contributory Factor(s): The R66 pilot flew in the vicinity of the Brimpton visual circuit at circuit altitude.

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:

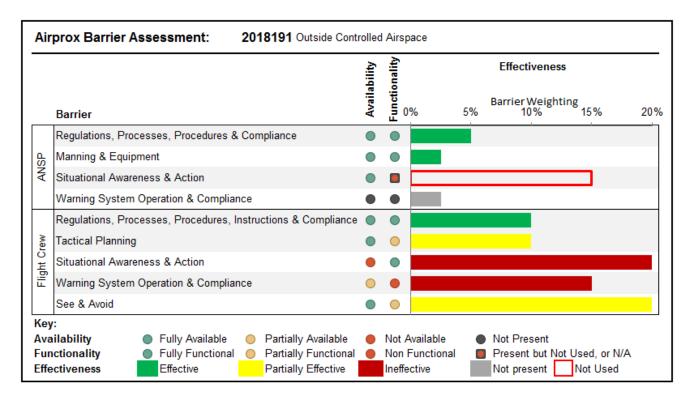
#### Flight Crew:

**Tactical Planning** was assessed as **partially effective** because the R66 pilot would have been better served communicating with Brimpton as he transited past, and Farnborough LARS beforehand, to increase his SA.

**Situational Awareness and Action** were assessed as **ineffective** because the pilots were on different frequencies and therefore neither pilot had SA on the other aircraft.

**Warning System Operation and Compliance** were assessed as **ineffective** because the Tecnam had PilotAware but this was not configured for audio alerts and he was looking for geographical features prior to re-joining and not at the display.

**See and Avoid** were assessed as **partially effective** because the R66 pilot did not see the Tecnam, and the Tecnam pilot saw the R66 later than desirable.



<sup>&</sup>lt;sup>4</sup> The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the <u>UKAB Website</u>.