## **AIRPROX REPORT No 2023177**

Date: 10 Aug 2023 Time: 1303Z Position: 5112N 00136W Location: Thruxton

## PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2	Lower(h
Aircraft	PA28	Eurofox	Diagram based on GPS data
Operator	Civ FW	Civ FW	and pilot reports
Airspace	Thruxton ATZ	Thruxton ATZ	3390)
Class	G	G	Sudgerskall
Rules	VFR	VFR	1370ft 1258:00 dtherden
Service	AGCS	AGCS	
Provider	Thruxton Radio	Thruxton Radio	
Altitude/FL	Not recorded	~880ft	
Transponder	None <sup>1</sup>	A, C, S	To Clanville
Reported			EGHO 1259:40 shaw Per 24
Colours	Blue/White	Yellow	118.280 Mewsey
Lighting	Strobes, Beacon	Strobes, Landing,	
		HISL, Anti-coll	THRUXTION S
Conditions	VMC	VMC	020
Visibility	>10km	>10km	racing
Altitude/FL	800ft	800ft	circuit Monxton Anna
Altimeter	QFE (1007hPa)	NR	PA28 750ft Valley 0
Heading	210°	NR	1301:40
Speed	95kt	NR	1303:20
ACAS/TAS	Not fitted	Not fitted	Approximate position of CPA CPA ~1303:20 - NK V/NK H
Separation at CPA			Grateley
Reported	Oft V/200ft H	500ft V/1NM H	Goodwa
Recorded	NK V/NK H		

THE PA28 PILOT reports that they had been flying as a PPL instructor from the right-hand seat doing circuits with their student on RW12. On their penultimate circuit they had heard the Eurofox pilot ask Thruxton Radio about joining. Thruxton Radio replied "join as published" which should mean flying down the hard runway at 1200ft QFE and when overhead the airfield descend into the grass runway circuit. On climb-out, Thruxton Radio had warned the PA28 pilot of an aircraft joining from the south. The PA28 pilot had replied "looking for traffic". Shortly after turning onto crosswind the PA28 pilot had spotted the converging aircraft in their 10 o'clock on a constant bearing. Thruxton Radio warned the PA28 pilot again that the other aircraft had been close [and] the PA28 pilot radioed that they had been visual and that the Eurofox [appeared] to have been on a collision course and [asked] if they had been going to give way to circuit traffic? There had been a few 'um' and 'errs' radio calls but the PA28 pilot did not know who from. The PA28 pilot recalls that the Eurofox had continued to close on them, and the PA28 pilot had turned right slightly to keep away. The Eurofox had radioed to say they had then seen the PA28 and would allow them to go first. At this point the Eurofox had banked slightly left and had been in formation with the PA28 at about 200ft in their 9 o'clock slowly passing behind. The PA28 pilot recalls that they had been able to read their [registration] on the side of the aircraft and could see both pilots very easily from that distance. The PA28 pilot radioed that the Eurofox had been within 500ft of their aircraft and that this had been an Airprox [and] had lost sight of the Eurofox a few seconds later as they had started their turn onto downwind. The PA28 pilot reports having spoken to the other pilot on the ground and they came across as belligerent, convinced they had done nothing wrong and that the PA28 pilot should have taken avoiding action instead of them. The Eurofox pilot also admitted that they hadn't seen the PA28 initially but that they estimated that they had been 0.5NM mile from them. The Eurofox pilot later showed the PA28 pilot the GPS trace of their join. It had been totally nonstandard [as] they had entered the ATZ and left it again to re-enter a short while afterwards whilst

<sup>1</sup> The PA28 pilot reports to have been equipped with Mode A and C SSR but this was not seen on radar replays.

avoiding noise abatement areas. The Eurofox pilot then joined on a 45° intercept to the start of the downwind leg.

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

**THE EUROFOX PILOT** reports that they had spoken to Boscombe Down en route to Thruxton, and had been given RW17RH [they recall] for landing. The pilot had asked Thruxton if they could join downwind and had been [approved] and that there had been one in the circuit. The Eurofox pilot reports having made six radio calls notifying their distance from the aerodrome – 5NM, 4NM, 3NM, approaching downwind and downwind with intentions. The pilot recalls having seen the PA28 aircraft on climb-out from Thruxton, and when the PA28 pilot conveyed their intention to stay in the circuit on crosswind, the Eurofox pilot allowed the PA28 to go in front and had been visual.

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

THE THRUXTON AGO reports that this report had been submitted [as a result] of a direct request by the UK Airprox Board. The AGO reports that they had been acting as the Duty Operations Manager/AGCS operator at the time of the incident. At approximately 1255 they had received an RT call from [the Eurofox pilot] wishing to land at Thruxton. The respective runway-in-use and QFE had been passed to the pilot (RW12RH), they also advised the pilot-in-command that the circuit pattern had been active. After the pilot had readback the correct information passed to them, the AGO recalled a subsequent RT message from the Eurofox pilot asking "how would you like me to join?" which had seemed somewhat unorthodox for an aircraft in receipt of an AGCS. The AGO had replied to the pilot, stating that the join should be carried out as published (the website depicts an overhead join for RW12/30 from the northeast for noise abatement purposes, and a subsequent join onto the early part of the downwind leg). The AGO had first observed the Eurofox approximately 2.5NM northeast of the aerodrome at a height of about 1000ft AGL, heading in a southeasterly direction. It appeared to maintain its height and heading until it was approximately 2.5 NM east-southeast of Thruxton, before then having turned onto a westerly heading. At this time the PA28 had just got airborne again on RW12, with the intent to conduct a further circuit. It had been shortly after this time that it had become evident that a potential confliction between the two aircraft could occur. The AGO cannot recall if they had advised the pilot of the Eurofox regarding the circuit traffic at that precise time, but they vividly remember warning the pilot of the PA28, who is [familiar with] Thruxton. After the AGO had advised the pilot of the PA28 regarding the potential arising confliction, they had replied by stating that they had not had visual contact with the Eurofox - by this time the AGO estimated that the Eurofox had passed just in front of the PA28 at a similar height and at a range of approximately 500m or less. Very shortly after this, the pilot of the PA28 confirmed that they had then had visual contact with the Eurofox and would take avoiding action. After a coincidental meeting of both respective pilots in the Tower approximately 20min after the incident, it had become fairly evident that no common ground was reached between them regarding who had been at fault.

The AGO perceived the severity of the incident as 'Medium'.

## **Factual Background**

The weather at Boscombe Down was recorded as follows:

METAR EGDM 101250Z 19010KT 9999 FEW026 24/17 Q1018 NOSIG RMK BLU BLU=

## **Analysis and Investigation**

#### **UKAB Secretariat**

Figure 1 (below) shows the Joining Procedure for RW30LH and 12RH, described as:

All aircraft should join from the north-east to conform to noise abatement procedures. A south-westerly heading should be flown to the overhead and aircraft are to join on the early stages of the downwind leg for the respective runway-in-use.

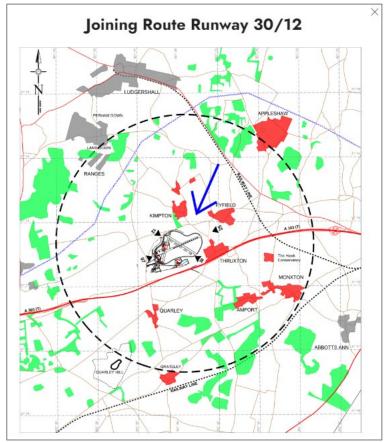


Figure 1 Fixed-Wing Joining Procedures RW30/12

The PA28 and Eurofox 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>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.3

## Summary

An Airprox was reported when a PA28 and a Eurofox flew into proximity at Thruxton at 1303Z on Thursday 10th August 2023. Both pilots were operating under VFR in VMC and in receipt of an AGCS from Thruxton.

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

Information available consisted of reports from both pilots, GPS tracking data and reports from the AGO 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.

The Board first looked at the actions of the PA28 pilot, noting that they had been in an instructional role on circuit training when they had heard the Eurofox pilot call to join and that the AGO had responded stating 'join as published'. In continuing their circuit training, the PA28 pilot had become aware of the Eurofox in their 10 o'clock position and had queried whether that pilot had also gained visual. The PA28 pilot continued and ultimately grew concerned at their proximity (CF8) as the Eurofox then passed abeam as they had continued their circuit detail. Members noted that neither aircraft carried electronic conspicuity equipment (EC) and that only generic situational awareness for the pilots (CF6) had been enabled through radio calls. Members reflected that all pilots, and instructional aircraft in particular, should be encouraged to equip with EC devices.

<sup>&</sup>lt;sup>2</sup> UK Reg (EU) SERA.3205 Proximity.

<sup>&</sup>lt;sup>3</sup> UK Reg (EU) SERA.3225 Operation on and in the Vicinity of an Aerodrome.

Turning to the actions of the Eurofox pilot, members noted that they had sought permission to join and had been advised to 'join as published' which, as an AGO, had been a clear statement within their authorised remit with the procedure having been laid out on the aerodrome website and in the UK AIP. The Eurofox pilot had not followed the published joining procedure and had continued into, out of, and back into the Thruxton ATZ (CF1, CF2, CF4), ultimately joining the circuit from the downwind position (CF3) and, having visually acquired the PA28, had then allowed the aircraft to pass close down their right-hand side (CF5, CF7).

When considering the role of the AGO, members re-stated the limitations of an AGCS and opined that there had been little more they could have done. They had been clear in the response to the request to join, having not been drawn into approving or directing the Eurofox pilot but simply re-stating the need to 'join as published'. The Board agreed that the AGO had continued to advise both pilots of the presence of others in the circuit.

When determining the risk of the Airprox, the Board considered the reports from both pilots and that of the AGO. They noted that both pilots had declared visual with the other at different times and both had been in receipt of information calls from the AGO. Members therefore agreed that, although safety had been degraded, there had been no risk of collision and accordingly assigned a Risk Category C to this event.

# PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

#### Contributory Factors:

	2023177						
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification			
	Flight Elements						
	Regulations, Processes, Procedures and Compliance						
1	Human Factors	Use of policy/Procedures	Events involving the use of the relevant policy or procedures by flight crew	Regulations and/or procedures not complied with			
	Tactical Planning and Execution						
2	Human Factors	Action Performed Incorrectly	Events involving flight crew performing the selected action incorrectly	Incorrect or ineffective execution			
3	Human Factors	Monitoring of Environment	Events involving flight crew not to appropriately monitoring the environment	Did not avoid/conform with the pattern of traffic already formed			
4	Human Factors	Pre-flight briefing and flight preparation	An event involving incorrect, poor or insufficient pre-flight briefing				
	Situational Awareness of the Conflicting Aircraft and Action						
5	Human Factors	Incomplete Action	Events involving flight crew performing a task but then not fully completing that task or action that they were intending to carry out	Pilot did not sufficiently integrate with the other aircraft despite Situational Awareness			
6	Contextual	Situational Awareness	Events involving a flight crew's	Pilot had no, late, inaccurate or only			
	Contextual	and Sensory Events	awareness and perception of situations	generic, Situational Awareness			
	• See and Avoid						
7	Human Factors	• Incorrect Action Selection	Events involving flight crew performing or choosing the wrong course of action	Pilot flew close enough to cause concern			
8	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			

Degree of Risk: C

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

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<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>.

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 Thruxton AGO is not required to sequence traffic in the circuit.

# Flight Elements:

Regulations, Processes, Procedures and Compliance were assessed as partially effective because the Eurofox pilot did not fly the arrival procedure as published.

**Tactical Planning and Execution** was assessed as **partially effective** because the Eurofox pilot did not conform with the pattern of traffic as established by the PA28.

Situational Awareness of the Conflicting Aircraft and Action were assessed as partially effective because both the PA28 and Eurofox pilots had only generic Situational Awareness of the relative position of the other aircraft.

