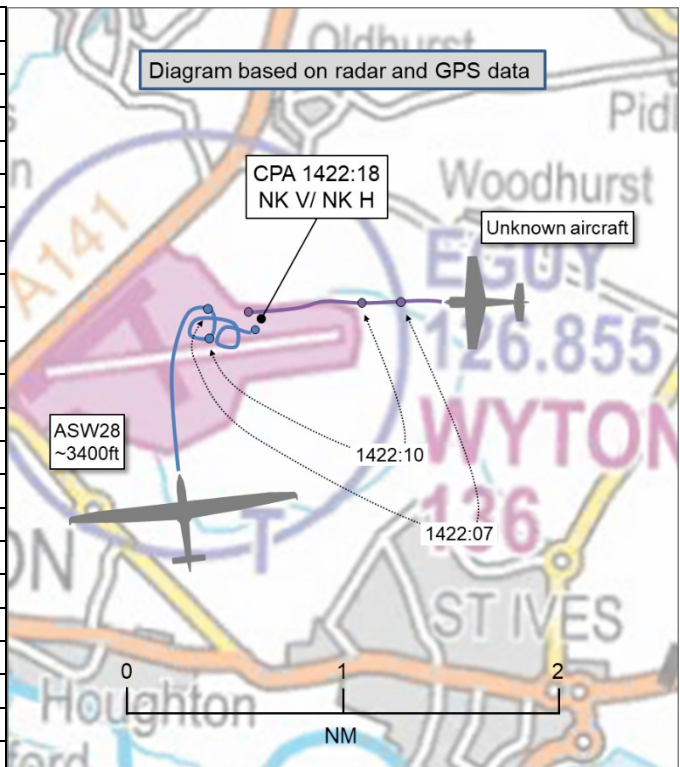


**AIRPROX REPORT No 2022157**

Date: 04 Aug 2022 Time: 1422Z Position: 5221N 00007W Location: Wyton

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

Recorded	Aircraft 1	Aircraft 2
Aircraft	ASW28	Unk light-aircraft
Operator	Civ Gld	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	NK
Service	None	NK
Altitude/FL	~3400ft	NK
Transponder	Not fitted	NK
<b>Reported</b>		
Colours	White, blue	NK
Lighting	None	NK
Conditions	VMC	NK
Visibility	>10km	NK
Altitude/FL	3300ft	NK </td
Altimeter	QFE (1015hPa)	NK
Heading	'thermalling'	NK
Speed	60kt	NK
ACAS/TAS	FLARM	NK
Alert	None	NK
<b>Separation at CPA</b>		
Reported	200ft V/200m H	NK V/NK H
Recorded	NK V/ NK NM H	



**THE ASW28 PILOT** reports that they were approximately 3.5NM south of Upwood and had been informed that there may be aerobatics in the overhead at Conington airfield about 5NM to the west of Upwood. They were proceeding on a generally northerly track and had entered a thermal. At the end of the third turn, having established themselves in the thermal and climbing at just under 4kt, they observed a fast moving aircraft on a largely southerly track, completing a horizontal aerobatics manoeuvre. It was closing fast but their tracks were not on a collision course. The aircraft was about 200ft above and the [ASW28 pilot] was concerned that they may have been in a blind spot. A few seconds later, the [aerobatics] aircraft commenced a 45° downline and the [ASW28 pilot] immediately turned 90° right as they had no idea what the pilot's intentions were for the next manoeuvre. The [aerobatics] aircraft levelled-off after the downline and, now at about 200ft below, commenced a series of rolls. At the closest point, they would estimate a separation of 200m but the concern was that they had not been seen. They opined that if they had, the other aircraft would simply have continued level flight to a point where the separation was increasing and not reducing as it was during the downline.

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

**THE PILOT** of the aircraft performing aerobatics could not be traced.

**Factual Background**

The weather at RAF Wittering was recorded as follows:

METAR EGXT 041450Z 30011KT CAVOK 21/06 Q1015 BLU

## Analysis and Investigation

### UKAB Secretariat

An analysis of the NATS radar replay was undertaken and the ASW28 was not observed. The radar replay showed an intermittent and primary-only trace of an aircraft that was observed to have been tracking in a southerly direction and had then turned west. It appeared to have been making rapid movements and it seemed likely to have been the aircraft described by the ASW28 pilot that had been performing aerobatics. The aircraft had been 0.2NM from the centre of Wyton at the time of the reported Airprox (see Figure 1) but the pilot could not be traced. The pilot of the ASW28 had kindly supplied the GPS data for their track and it was by combining the radar and GPS data sources that the diagram was constructed. The separation of the aircraft at CPA could not be determined.

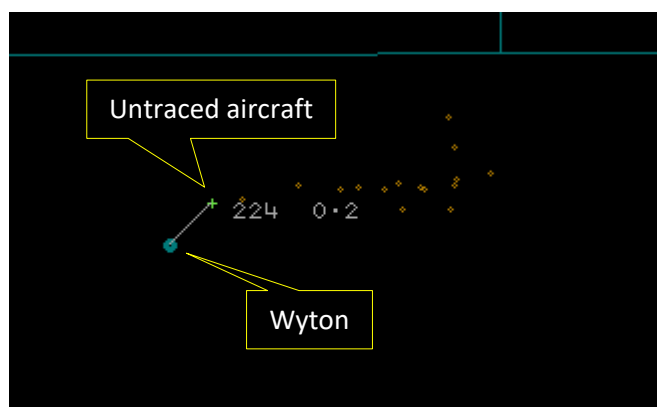


Figure 1 – The estimated CPA at 1422:18

Both 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> On the assumption that the untraced aircraft was heavier-than-air and power-driven then, if the incident geometry is considered as converging, the untraced aircraft pilot was required to give way to the ASW28.<sup>3</sup>

## Comments

### AOPA

It is unfortunate that, despite best efforts, the aerobatic aircraft could not be identified, apparently wasn't transponding nor fitted with any form of EC device compatible with the glider's EC device. It was an effective lookout that prevented a MAC.

### BGA

With no interoperable Electronic Conspicuity between the glider and the unknown aerobatic aircraft, and neither in receipt of an ATS, see-and-avoid was the only operating MAC safety barrier in this incident. The ASW28 pilot is to be commended for maintaining a good lookout and manoeuvring to remain clear.

## Summary

An Airprox was reported when an ASW28 and an untraced aircraft flew into proximity at Wyton at 1422Z on Thursday 4<sup>th</sup> August 2022. The ASW28 pilot was operating under VFR in VMC not in receipt of an ATS. The pilot of the other aircraft could not be traced.

<sup>1</sup> (UK) SERA.3205 Proximity.

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

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

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

Information available consisted of a report from the ASW28 pilot, radar photographs/video recordings, GPS data from the glider and reports from the appropriate operating authorities. 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 considered the actions of the pilot of the ASW28 and acknowledged that an effective lookout had allowed for a brief moment to assess the movements of the aerobatic aircraft and to attempt to remain clear of conflict. Noting that the pilot of the ASW28 had had awareness that there may be aerobatic activity at Conington (8NM to the northwest), the Board agreed that the ASW28 pilot had not had any situational awareness of an aircraft in the vicinity of Wyton (**CF1**).

Members discussed whether there was a ground presence at Wyton and observed that, despite there being an entry for Wyton in popular airfield guides, there is no entry for Wyton in the UK AIP or Military AIP. It was noted that a frequency for Wyton is marked on the current 1:250,000 and 1:500,000 VFR aeronautical charts and the Board suggested that it may have been prudent for each pilot to have made a call on that frequency in the interests of obtaining situational awareness of aircraft movements in their vicinity.

Turning their attention to the pilot of the aerobatic aircraft, members expressed disappointment that the pilot could not be traced and, noting that the aircraft appeared on radar only as a primary return, were also disappointed that there had been no Mode C information to assess. Members wished to emphasise that, in accordance with UK SERA 13001, when an aircraft carries a serviceable SSR transponder, the pilot shall operate the transponder at all times during flight, regardless of whether the aircraft is within or outside airspace where SSR is used for air traffic service purposes. Pilots are to operate the transponder if equipped and to the full extent of its capabilities. It was presumed that the pilot of the unknown aircraft had been performing aerobatics with the use of Wyton as a convenient line feature. It was agreed that the pilot of the ASW28 had been concerned with the proximity of the unknown aircraft (**CF2**) and members determined that although safety had been degraded, there had been no risk of collision. Consequently, the Board assigned a Risk Category C to this event.

## **PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK**

### Contributory Factors:

2022157				
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification
<b>Flight Elements</b>				
<b>• Situational Awareness of the Conflicting Aircraft and Action</b>				
1	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
<b>• See and Avoid</b>				
2	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>

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

<sup>4</sup> The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).

**Flight Elements:**

**Situational Awareness of the Conflicting Aircraft and Action** were assessed as **ineffective** because the ASW28 pilot had not had any situational awareness that aerobatic aircraft may be in the vicinity of Wyton.

<b>Airprox Barrier Assessment: 2022157</b>		Outside Controlled Airspace						
<b>Barrier</b>		<b>Provision</b>	<b>Application</b>	<b>Effectiveness</b> Barrier Weighting				
				0%	5%	10%	15%	20%
Ground Element	Regulations, Processes, Procedures and Compliance	○	○					
	Manning & Equipment	○	○					
	Situational Awareness of the Confliction & Action	○	○					
	Electronic Warning System Operation and Compliance	○	○					
Flight Element	Regulations, Processes, Procedures and Compliance	✔	✔					
	Tactical Planning and Execution	✔	✔					
	Situational Awareness of the Conflicting Aircraft & Action	✘	✔					
	Electronic Warning System Operation and Compliance	○	○					
	See & Avoid	✔	✔					
<b>Key:</b>		<u>Full</u>	<u>Partial</u>	<u>None</u>	<u>Not Present/Not Assessable</u>	<u>Not Used</u>		
Provision	✔	○	✘	○				
Application	✔	○	✘	○				
Effectiveness								