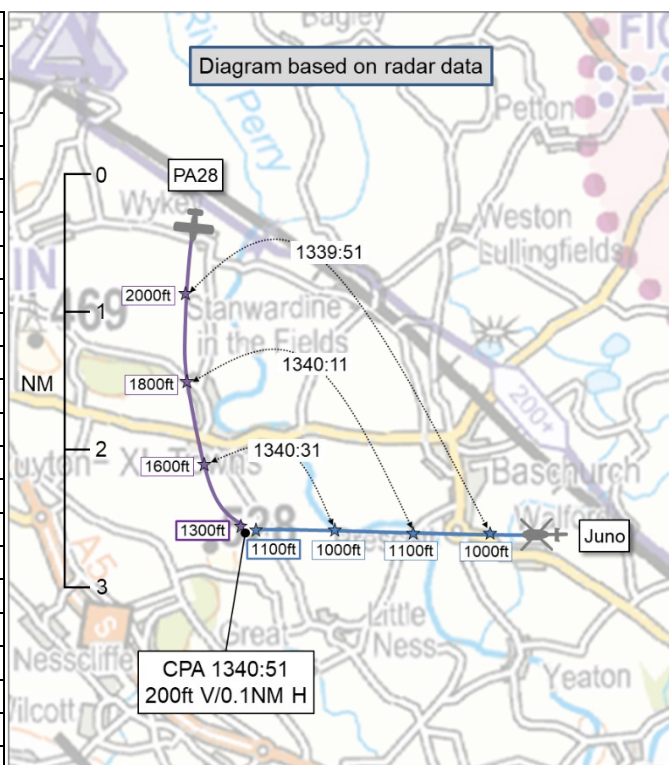


**AIRPROX REPORT No 2025242**

Date: 24 Nov 2025 Time: 1341Z Position: 5247N 00254W Location: 1NM NNE of Nesscliffe

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

| Recorded                 | Aircraft 1           | Aircraft 2      |
|--------------------------|----------------------|-----------------|
| Aircraft                 | Juno                 | PA28            |
| Operator                 | HQ Air (Trg)         | Civ FW          |
| Airspace                 | London FIR           | London FIR      |
| Class                    | G                    | G               |
| Rules                    | VFR                  | VFR             |
| Service                  | Basic                | Basic           |
| Provider                 | Shawbury Low Lvl     | Shawbury Zone   |
| Altitude                 | 1100ft               | 1300ft          |
| Transponder              | A, C, S              | A, C, S         |
| <b>Reported</b>          |                      |                 |
| Colours                  | Yellow and black     | Dark blue/white |
| Lighting                 | Nav, ldg, strb, HISL | Strbs, ldg, nav |
| Conditions               | VMC                  | VMC             |
| Visibility               | >10km                | >10km           |
| Altitude                 | 1000ft               | NK              |
| Altimeter                | QNH (993hPa)         | NK              |
| Heading                  | 270°                 | NK              |
| Speed                    | 85kt                 | NK              |
| ACAS/TAS                 | TAS                  | Not fitted      |
| Alert                    | TA                   | N/A             |
| <b>Separation at CPA</b> |                      |                 |
| Reported                 | 300ft V/<1NM H       | Not seen        |
| Recorded                 | 200ft V/0.1NM H      |                 |



**THE JUNO PILOT** reports that their aircraft was westbound toward Nesscliffe Hill at 1000ft QNH, at 110kt under a Basic Service. They had a [TAS] audible warning of an aircraft, on their right, 3 o'clock position, 2NM. The [TAS] visually indicated a yellow tag right of their aircraft and 500ft above them. The crew members looked right of their aircraft to identify the conflict. The non-handling pilot looked forward and saw the aircraft bearing in the half-past 12 position, opposite direction, approximately 300ft above them. The non-handling pilot warned the crew and prompted for the aircraft to descend. The sortie continued without further incident.

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

**THE PA28 PILOT** reports that they were practising forced landings and other general handling manoeuvres in their local flying zone to the west of Sleaf, whilst being coached by a more experienced pilot who was sat beside them as a passenger in the right-hand seat. Neither of them recall getting particularly close to any helicopters, though seeing Shawbury helicopters is a fairly common occurrence when flying [in that vicinity]. They were receiving a Basic Service from Shawbury Zone at the time and, again, neither of them recall any traffic calls meant for them on that frequency though, obviously, they could not be certain. Unfortunately, neither of them were tracking the flight on their PEDs as they were not leaving the local flying area, so they were fairly certain of their approximate position at all times.

**THE SHAWBURY CONTROLLER** reports that the Airprox was not declared on frequency. Given the time and date on the initial report they believed that they were the controller sat in RA monitoring all frequencies with a reasonably quiet air picture. They recalled having a few aircraft on, receiving a Basic Service, and 1 Juno receiving a Traffic Service in IFR Box A. As mentioned, there was no mention of an Airprox on any ATC frequency. Furthermore, they did not recall seeing any of their Basic Service tracks being in direct conflict with other aircraft, especially one with a flight safety risk.

The controller perceived the severity of the incident as 'Low'/'Negligible'

**THE SHAWBURY SUPERVISOR** reports that they did not witness the occurrence and were only made aware on 25<sup>th</sup> November [the following day] by the submission of an ASOR (Air Safety Occurrence Report) [from the Juno pilot].

## Factual Background

The weather at RAF Shawbury was recorded as follows:

METAR EGOS 241320Z 33014G24KT 9999 FEW018 SCT022 BKN030 08/05 Q0995 TEMPO 7000 -RA RMK BLACKWHT TEMPO WHT

## Analysis and Investigation

### BM HQ 2Gp

Background.

Both Juno and PA28 pilots were in communication with Shawbury, under a Basic Service. The Shawbury controller was band-boxed on Approach, Zone and Low Level due to a quiet air picture.

Sequence of Events.

At 1330:40, the PA28 pilot contacted Shawbury Zone requesting a Basic Service on a round-robin transit from [departure airfield].

At 1337:42, the Juno pilot contacted Shawbury Low Level “*Harmer Hill for Western, operating Criggion, Basic Service*”. The Juno pilot then conducted a radio check with Shawbury Low Level, to which both reported readability 5.

At 1340:30, Shawbury Low Level was contacted by [the pilot of] another aircraft requesting a Basic Service.



Figure 1 – Radar screen at point of CPA

CPA occurred at 1340:49, with a separation of 0.1NM laterally and an 300ft vertically. There was no mention of the Airprox or close proximity traffic from either pilot on frequency.

Local BM Investigation.

A local investigation was conducted by Shawbury following the event and identified no ATS-related factors.

2Gp Analysis.

In agreement with the Local Investigation, the controller acted accordingly and there were no ATS-related factors.

**UKAB Secretariat**

An analysis of the NATS radar replay was undertaken and both aircraft were identified using Mode S data. CPA was assessed to have occurred at 1340:51 with 0.1NM lateral and 200ft vertical separation (Figure 2).

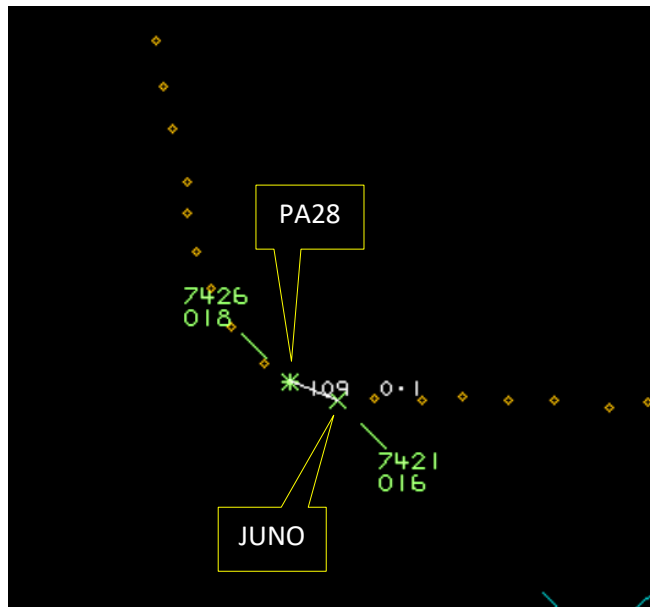


Figure 2 - Time 1340:51

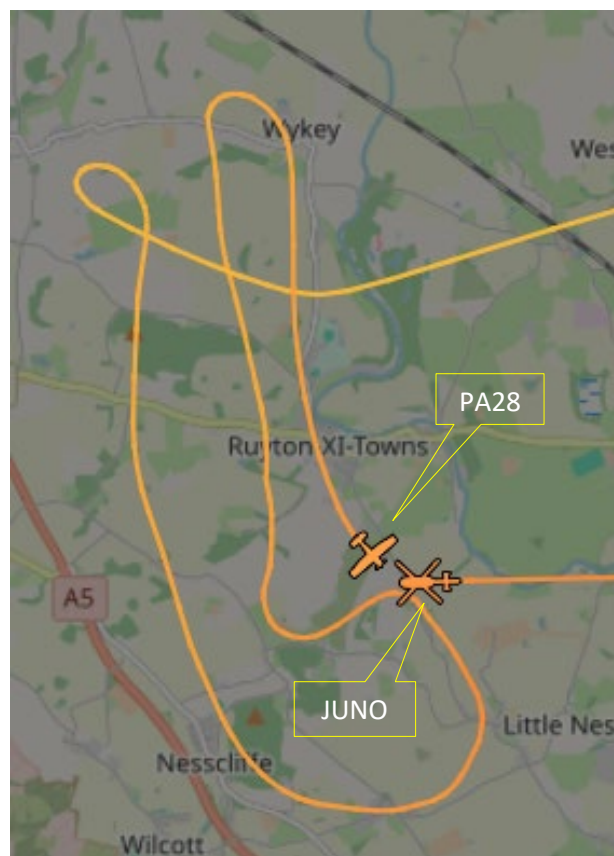


Figure 3 – Time 1340:40 prior to CPA.

Further analysis of third-party tracking software was also undertaken and both aircraft were detected using ADS-B sources. The PA28 was seen to have been manoeuvring prior to the time of the Airprox, in line with the practice forced landings exercise described, finally heading approximately south and descending. The Juno was below and to the left of the PA28, and the PA28 was seen to turn left towards the Juno (Figure 3).

The Juno and PA28 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 Juno pilot was required to give way to the PA28.<sup>3</sup>

## Comments

### HQ Air Command

The Airprox occurred in Class G airspace as the Juno departed the RAF Shawbury MATZ to the west and the PA28 was descending during a PFL. The PA28 was a civilian aircraft so its planned routeing and operating area were not available on the Centralised Aviation Data Service (CADS). As a result, the Juno crew were unable to deconflict their sortie from that of the PA28 at the planning stage. Both aircraft were in receipt of a Basic Service and neither aircraft was passed Traffic Information regarding the other. While the PA28 was not fitted with a system that provided traffic alerts, its transponder was compatible with the [TAS] fitted in the Juno. The Juno's [TAS] alerted the crew to the presence of the PA28, which allowed the crew to visually acquire it and take appropriate action to increase separation. The PA28 pilot was unaware of the presence of the Juno throughout the event.

### AOPA

When manoeuvring in Class G airspace, lookout is paramount. Collision avoidance can be enhanced with the addition of appropriate electronic conspicuity equipment. Lookout whilst manoeuvring can be assisted with a radar-based Traffic Service using a block of airspace.

## Summary

An Airprox was reported when a Juno and a PA28 flew into proximity 1NM north-northeast of Nesscliffe at 1341Z on Monday 24<sup>th</sup> November 2025. The Juno pilot was operating under VFR in VMC in receipt of a Basic Service from Shawbury Low Level, and the PA28 pilot was operating under VFR in VMC in receipt of a Basic Service from Shawbury Zone.

## **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 a report 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.

The Board first considered the actions of the Juno pilot, and noted that they had been operating on a low level sortie and had, therefore, been in communication with the Shawbury Low Level controller. The Board noted that the pilot had requested a Basic Service and members discussed whether a different level of service would have been possible while operating at low level in that area. A military controller member confirmed that the radar coverage would have been available from the surface to 3000ft from Shawbury Radar, although they commented that coverage would likely be difficult for the Juno if they had been at very low level. The Board agreed, therefore, that radar coverage had likely been available and, consequently, Traffic Information could have been passed. Members agreed that the Juno pilot may have been better served by requesting a Traffic Service (**CF4**), which would have obliged the

<sup>1</sup> (UK) SERA.3205 Proximity. MAA RA 2307 paragraphs 1 and 2.

<sup>2</sup> (UK) SERA.3210 Right-of-way (c)(1) Approaching head-on. MAA RA 2307 paragraph 13.

<sup>3</sup> (UK) SERA.3210 Right-of-way (c)(2) Converging. MAA RA 2307 paragraph 12.

controller to have monitored their flight and, therefore, might have improved their situational awareness through an earlier warning of the potential conflict with the PA28. The Board acknowledged, however, that the pilot had received a TA on their TAS (CF6) and, as a result, had visually acquired the PA28 and had descended to avoid it. Members commented that the avoidance manoeuvre would have been initiated only upon visual acquisition of the conflicting traffic, because the Juno pilot's standard procedure had not permitted them to have reacted to a TA while operating VFR. Members agreed that the Juno pilot had, ultimately, been concerned by the proximity of the PA28 (CF8) when they had sighted it.

The Board then considered the actions of the PA28 pilot, and noted that they had been in contact with the Shawbury Zone controller while general handling to the west of the Shawbury CMATZ. The Board noted that the PA28 pilot is familiar with the area and had stated that '*seeing Shawbury helicopters is a fairly common occurrence when flying [in that vicinity]*'. The Board was disappointed that the pilot had neither requested a Traffic Service nor informed the Shawbury controller of their intentions to descend during the PFL training, particularly in the knowledge that they may have been more likely to encounter helicopters at low level in their chosen area of operation. Members agreed that it may have been prudent for the PA28 pilot to have requested a Traffic Service, possibly within a block of airspace to better suit their flying exercise (CF4). Members further agreed that the pilot had not communicated their intentions to operate down to lower levels to the Shawbury controller (CF3), which may have increased the controller's situational awareness. The Board also noted that the PA28 pilot had not been able to hear any of the Juno pilot's transmissions because they had been operating on a different frequency, nor did they have any additional electronic conspicuity equipment fitted that might have alerted them to the Juno's presence. Members agreed, therefore, that the PA28 pilot had had no situational awareness of the presence of the Juno (CF5). The Board observed that as the PA28 had descended and commenced a descending left turn towards the Juno, the PA28 pilot's view of the Juno had potentially been obscured underneath the aircraft's right wing and/or nose. Members agreed that the PA28 pilot had not seen the Juno (CF7).

On considering the actions of the Shawbury controller, the Board noted that they had been operating in a band-boxed configuration over three separate frequencies. The Board discussed the inherent limitations of band-boxing, whereby a pilot can only monitor transmissions on their selected frequency. Military controller members agreed that cross-coupling the frequencies could have been a more prudent approach, as it would have allowed pilots to hear other airspace users in contact with Shawbury and thereby increased their situational awareness.<sup>4</sup> The Board noted that neither the Juno pilot nor the PA28 pilot had requested a Traffic Service, which had meant that the STCA had not been armed for those aircraft (CF2). The Board also noted that, with no alert from the STCA, the controller had not detected the potential conflict and members agreed that the Shawbury controller had not been required to monitor the Juno or PA28 under the terms of a Basic Service in any case (CF1).

In concluding their discussion, the Board noted that the developing conflict between the Juno and the PA28 had likely been unmonitored and undetected until the Juno pilot had received a TA on the PA28. Members agreed that safety had been degraded, but that the Juno pilot had taken timely and effective avoiding action away from the PA28. As such, the Board assigned Risk Category C to this event.

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

### **Contributory Factors:**

|    | 2025242  |                                    |                                     |  |
|----|--|------------------------------------|-------------------------------------|--|
| CF | Factor   | Description                        | ECCAIRS Amplification               | UKAB Amplification   |
|    | <b>Ground Elements</b>                               |                                    |                                     |  |
|    | • Situational Awareness and Action                   |                                    |                                     |  |
| 1  | Contextual   | • ANS Flight Information Provision | Provision of ANS flight information | The ATCO/FISO was not required to monitor the flight under a Basic Service |
|    | • Electronic Warning System Operation and Compliance |                                    |                                     |  |

<sup>4</sup> RAF Shawbury clarified that cross-coupling was not used as the Juno was on a discrete training frequency, in line with standard local practice. The Board acknowledges this and notes its reference was in general terms.

|   |               |  |   |  |
|---|---------------|--|---|--|
| 2   | Technical     | • Conflict Alert System Failure            | Conflict Alert System did not function as expected  | The Conflict Alert system did not function or was not utilised in this situation       |
| <b>Flight Elements</b>  |               |  |   |  |
| <b>• Tactical Planning and Execution</b>                              |               |  |   |  |
| 3   | Human Factors | • Accuracy of Communication                | Events involving flight crew using inaccurate communication - wrong or incomplete information provided                                  | Ineffective communication of intentions  |
| 4   | Human Factors | • Communications by Flight Crew with ANS   | An event related to the communications between the flight crew and the air navigation service.  | Pilot did not request appropriate ATS service or communicate with appropriate provider |
| <b>• Situational Awareness of the Conflicting Aircraft and Action</b> |               |  |   |  |
| 5   | 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>• Electronic Warning System Operation and Compliance</b>           |               |  |   |  |
| 6   | Contextual    | • Other warning system operation           | An event involving a genuine warning from an airborne system other than TCAS.   |  |
| <b>• See and Avoid</b>  |               |  |   |  |
| 7   | Human Factors | • Monitoring of Other Aircraft             | Events involving flight crew not fully monitoring another aircraft  | Non-sighting or effectively a non-sighting by one or both pilots                       |
| 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>5</sup>

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 Shawbury controller was not required to monitor either the Juno or the PA28 under the terms of a Basic Service.

**Electronic Warning System Operation and Compliance** were assessed as **not used** because the Shawbury STCA was not armed for either the Juno or PA28 flights.

#### **Flight Elements:**

**Tactical Planning and Execution** was assessed as **partially effective** because both the PA28 and Juno pilots could have requested a Traffic Service, and the PA28 pilot had not communicated their intentions to conduct PFLs to the Shawbury controller.

**Situational Awareness of the Conflicting Aircraft and Action** were assessed as **ineffective** because the PA28 pilot had no situational awareness of the presence of the Juno.

<sup>5</sup> The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).

| <b>Airprox Barrier Assessment: 2025242</b> |  | Outside Controlled Airspace |                   |      |                            |          |     |
|--|--|-----------------------------|-------------------|------|----------------------------|----------|-----|
| Barrier                                    | Provision  | Application                 | Effectiveness     |      |                            |          |     |
|  |  |                             | 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>                                |  | Full                        | Partial           | None | Not Present/Not Assessable | Not Used |     |
| Provision                                  | ✓  | !                           | ✗                 | ●    |                            |          |     |
| Application                                | ✓  | !                           | ✗                 | ●    | ○                          |          |     |
| Effectiveness                              |  |                             |                   |      |                            |          |     |