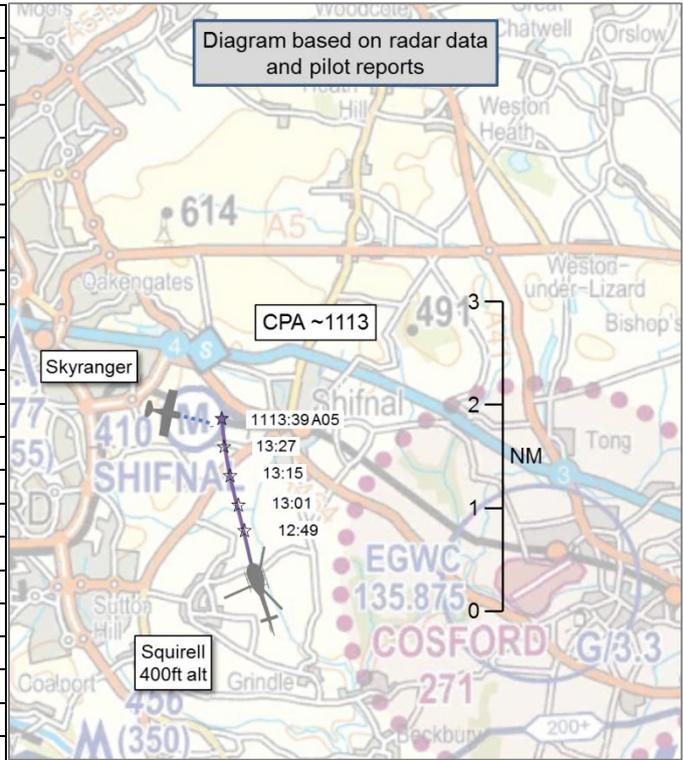


**AIRPROX REPORT No 2015182**

Date: 12 Oct 2015 Time: 1113Z Position: 5240N 00224W Location: IVO Shifnal Airfield

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

Recorded	Aircraft 1	Aircraft 2
Aircraft	Skyranger	Squirrel HT1
Operator	Civ Pte	HQ Air (Trg)
Airspace	Shawbury AIAA	LFA9
Class	G	G
Rules	VFR	VFR
Service	None	Basic
Provider	N/A	Shawbury
Altitude/FL	NK	600ft
Transponder	Off	A, C, S
Reported		
Colours	White	Black/yellow
Lighting	Strobes, nav	HISLs, nav
Conditions	VMC	VMC
Visibility	>10km	10km
Altitude/FL	700ft	100ft
Altimeter	QNH (1021hPa)	RPS (1000hPa)
Heading	100°	360°
Speed	70kt	100kt
ACAS/TAS	Not fitted	TAS
Alert	N/A	None
Separation		
Reported	300ft V/250m H	Not seen
Recorded	NK	



**THE SKYRANGER PILOT** reports that, prior to a one-hour flight in the local area, he called Cosford ATC (at 11.52 local time) to inform them that Shifnal Airfield was active; his understanding was that Cosford would then contact Shawbury to inform them. At 12.15 local time he took off from RW10. At approximately 700ft altitude, he noticed a helicopter converging on his track from the right. The helicopter was travelling from south to north, and would cross his path in seconds. He made a high angle of bank turn to the right to avoid a potential collision. The pilot commented that he is a flying instructor and considered that his awareness is very good; had this happened to one of his early solo students, or a low-hour's pilot, the outcome may have been more serious. Once he returned home, he called Cosford who advised him to call Shawbury Operations. Shawbury Operations said they had been informed that Shifnal Airfield was active, but could not explain why the helicopter was flying there. He was contacted later in the day by an RAF Officer, who requested that he file an Airprox.

He assessed the risk of collision as 'High'.

**THE SQUIRREL PILOT** reports that, on return from a standard low-level navigation sortie, he was informed an Airprox had been filed by a Shifnal based microlight pilot. Shifnal microlight site was abeam his route; its location was briefed on the ground by the student pilot, briefed at the start of the navigation leg and identified as they passed abeam. At no point did the crew see a microlight aircraft. The pilot reported being in receipt of a Basic Service on the Shawbury low-level UHF frequency.

**Factual Background**

The weather at Cosford was recorded as follows:

METAR EGWC 121150Z 33007KT 9999 SCT045 12/06 Q1022 BLU=  
 METAR EGWC 121050Z 35003KT CAVOK 11/06 Q1022 BLU=

## Analysis and Investigation

### Military ATM

The incident occurred on 12 Oct 15 at 1113 near Shifnal Airfield between a Squirrel helicopter and a Skyraanger microlight. The Squirrel was under a Basic Service with 'RAF Shawbury Low-Level'. ATC were not made aware of the event at the time of the Airprox, and a DASOR was not supplied by ATC. The controller could not recall the event, but the unit did supply a full transcript of the service provided to the Squirrel. The microlight was not transponding and did not appear on the RAC radar replays.

The Squirrel pilot was placed under a Basic Service at 1048:41 by the Shawbury Low-Level controller. At 1103:17, the Squirrel pilot transmitted that he was leaving the Dedicated User Area to the south for a short while but wanted to remain on a Basic Service. At 1103:57, Shawbury Low-level broadcasted to all stations that Shifnal was active with microlights.

The Squirrel pilot was under a Basic Service and responsible for collision avoidance, as per the rules of a UK FIS. No microlight return was found on the RAC selection of radars, and it is unlikely that the microlight appeared on the Shawbury radar. The controller did transmit that Shifnal was active, prior to CPA. The DASOR Occurrence Manager commented that Shifnal is located in a natural chokepoint between RAF Cosford ATZ and Telford.

### UKAB Secretariat

The Skyraanger and Squirrel 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 converging then the Skyraanger pilot was required to give way to the Squirrel<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<sup>3</sup>.

## Comments

### HQ Air Command

This incident occurred within the choke point between the Cosford ATZ and Telford. Despite being aware of the proximity of the Shifnal aerodrome to the planned route, and the potential for traffic to be in the vicinity, the Squirrel crew were unable to identify aircraft operating from the site and were unaware that an Airprox had occurred. Had both aircraft been fitted with IFF, it is likely that TI may have been made available to the Squirrel crew via the TAS. The choice of ATS is unlikely to have been a factor in this incident because the Skyraanger was not visible to the Shawbury Low-Level Controller.

## Summary

An Airprox was reported when a Skyraanger and a Squirrel flew into proximity at 1113 on Monday 12<sup>th</sup> October 2015. Both pilots were operating under VFR in VMC, the Skyraanger pilot not in receipt of a Service and the Squirrel pilot in receipt of a Basic Service from Shawbury.

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

Information available consisted of reports from both pilots, radar photographs/video recordings and a report from the appropriate ATC authority.

<sup>1</sup> SERA.3205 Proximity.

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

<sup>3</sup> SERA.3225 Operation on and in the Vicinity of an Aerodrome.

Members first considered the role of ATC in the Airprox and quickly agreed that, with the Skyranger pilot not in receipt of a FIS and the Squirrel pilot in receipt of a Basic Service from Shawbury (and potentially not in RTF contact at low-level), there had been negligible opportunity for direct ATC involvement.

Turning to the Skyranger pilot's actions, members commended him for pro-actively notifying that his airfield would be active; such actions provide a positive opportunity for other pilots to gain situational awareness if made in a timely manner. In this instance though, the call to Cosford, and the subsequent relaying to Shawbury, was made only 20-25mins before his departure, and those aircraft already airborne at this point could not benefit from the information unless they happened to be in RTF contact with Shawbury when they subsequently made their broadcast. Some Board members also wondered whether the Skyranger pilot had a higher expectation of deconfliction than was actually the case from his notifying Cosford that Shifnal was active. Such notification would not necessarily result in aircraft avoiding Shifnal; the requirement to remain clear was predicated on airfield traffic, not the existence of the airfield or notification of activity.

As for the Squirrel pilot's part in the incident, the Board noted that Shawbury had broadcasted Shifnal's activity to 'all stations', albeit just after the Squirrel pilot had told the Shawbury controller that he was leaving the Dedicated User Area to the south for a short time. In the 40sec since declaring his intentions, it was felt likely the Squirrel pilot would still have been within RT range of Shawbury but it was unclear whether he had actually received the transmission. Notwithstanding, it was clear to the Board from the Squirrel pilot's report that he was aware of the airfield, had briefed it before flight and at the start of the navigation leg, and had identified the airfield as he flew by. Members agreed that the area between Cosford ATZ and the town of Telford presented a choke-point to low-flying traffic, but also felt that, in acknowledgement of his awareness of the airfield, the Squirrel pilot had had the opportunity to route farther to the east, whilst remaining clear of the Cosford ATZ. After some discussion it was also agreed that, given the availability of that option, the Squirrel pilot's routing close to a promulgated and active microlight site had been contributory to the Airprox.

Members noted that the Skyranger pilot had elected not to turn on his SSR transponder, and commented that this was a lost barrier to mid-air collision. Had he done so, the TAS fitted to the Squirrel would, in all likelihood, have indicated the Skyranger's presence and enhanced the potential for the Squirrel pilot to visually acquire it. Members reiterated previous advice always to select SSR transponders on, with all available modes, because other aircraft fitted with TAS or TCAS would then be able to display traffic information to the benefit of all.

Members discussed the cause and risk at some length. In the end, they agreed that, although the aircraft had been flown into proximity due to a non-sighting by the Squirrel pilot and a late sighting by the Skyranger pilot, their reported separation of 250m with 300ft height split was such that, although the Skyranger pilot had undoubtedly been startled and concerned enough to conduct an avoiding manoeuvre, having done so in a timely and effective manner there was no proximate risk of collision.

### **PART C: ASSESSMENT OF CAUSE AND RISK**

<u>Cause:</u>	A non-sighting by the Squirrel pilot and a late sighting by the Skyranger pilot.
<u>Contributory Factor:</u>	The Squirrel pilot flew close to a promulgated and active microlight site.
<u>Degree of Risk:</u>	C.