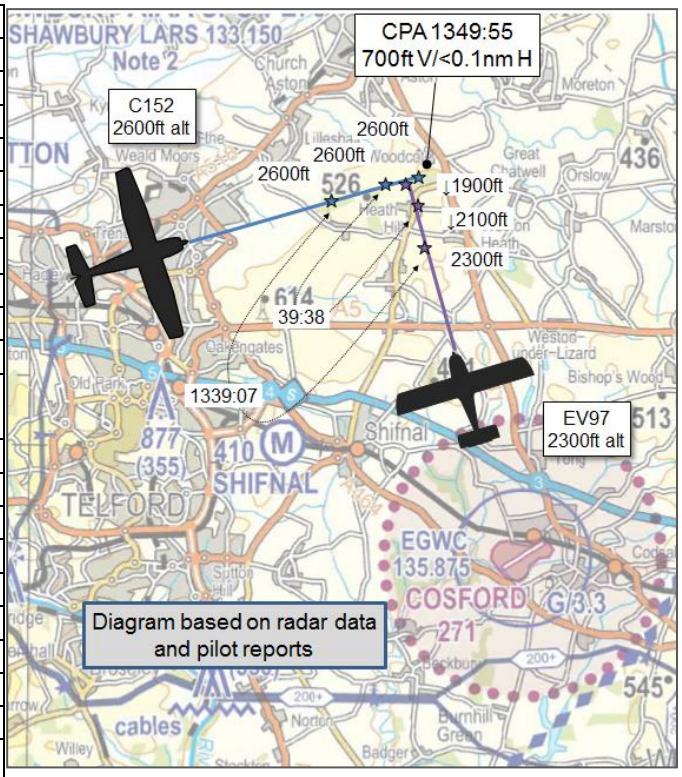
AIRPROX REPORT No 2017140

Date: 03 Jul 2017 Time: 1349Z Position: 5243N 00222W Location: 6nm NNW Cosford

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	EV97	C152
Operator	Civ Trg	Civ Trg
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Basic	Basic
Provider	Shawbury	Shawbury
Altitude/FL	1900ft	2600ft
Transponder	A, C, S	A, C
Reported		
Colours	Silver, Red, Black	White, Blue
Lighting	Landing light	Strobes, Nav
Conditions	VMC	VMC
Visibility	>40km	15km
Altitude/FL	2600ft	2500ft
Altimeter	QNH (1019hPa)	RPS (1009hPa)
Heading	340°	060°
Speed	85kt	90kt
ACAS/TAS	Not fitted	Not fitted
Separation		
Reported	2-300ft V <0.5nm H	300ft V 0.25nm H
Recorded	700ft V/0.1nm H	



THE EV97 PILOT reports that he had just left the Cosford frequency after routing through the Cosford overhead, and attempted to call Shawbury Zone. The Shawbury LARS controller was busy with numerous Sleap inbounds and was restricting them all to not below various levels, so he was not able to call until there was a gap on the frequency. Approx 5-6nm south of Newport he made contact and asked for a Basic Service. He then saw an object to his left, crossing left to right, at the same time the LARS controller passed Traffic Information on it, calling 'Traffic believed to be you' and told him that the traffic was half a mile away and indicating 300ft above. He closed the throttle and placed his aircraft in a steep descent. The other aircraft, thought to be a Cessna 150 or 152, passed directly over with 3-400ft separation. After it had passed, he resumed his navigation and continued with the flight. He opined that the controller displayed exemplary duty of care in passing the Traffic Information despite that fact that he had only asked for a Basic Service, which had not yet been agreed upon.

THE C152 PILOT reports that he was approx 3nm south of Newport when Shawbury LARS advised him about the presence of microlight activity in the area. He then saw what he believed to be an EV97, about 300ft below and slightly ahead at a distance of about 0.25nm to the east-southeast, heading roughly west-northwest. He judged that he was safely clear of the traffic and did not take avoiding action because he thought that turning to the north would mean that he would lose sight of the traffic, and turning towards and then behind the traffic may have been confusing and distracting to the other pilot given the short distances involved. He reported seeing the traffic to Shawbury ATC and then continued with his planned route.

He assessed the risk of collision as 'None'.

THE SHAWBURY LARS CONTROLLER reports that the EV97 pilot called him for a Basic Service; upon hearing the pilot's estimated position, he saw that the radar contact that he believed to be the EV97 appeared to be in immediate confliction. He called the traffic to the pilot, and then subsequently provided a Basic Service. It was not until the next day that the EV97 pilot had decided that on reflection he would report the incident as an Airprox because he believed the incident to be of medium/high risk of collision.

He perceived the severity of the incident as 'Medium'.

THE SHAWBURY SUPERVISOR reports that he didn't witness the event, and was not made aware of it until notified by the pilot via email.

Factual Background

The weather at Cosford was recorded as follows:

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METAR EGWC 031350Z 36010KT 9999 SCT032 20/12 Q1020 BLU=
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Analysis and Investigation

Military ATM

Figures 1-3 show the positions of the EV97 and the C152 at relevant times in the lead up to and during the Airprox. The screen shots are taken from a replay using the Clee Hill radar, which is not used by Shawbury ATC, therefore is not necessarily representative of the picture available to the controller.

At 13:49:02 (Figure 1), the EV97 called Shawbury Zone requesting Basic Service.

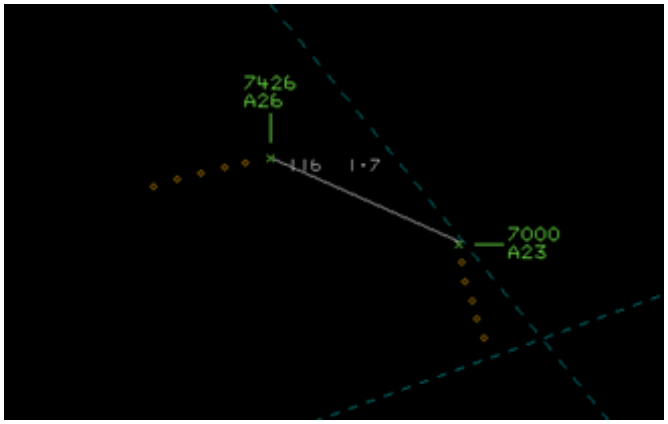


Figure 1: Geometry at 13:49:02

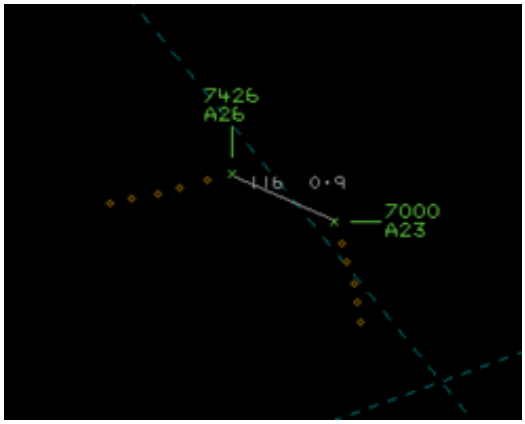


Figure 2: Geometry at 13:49:26

(C152 - 7426; EV97 - 7000)

At 13:49:26 (Figure 2), the Shawbury Zone controller passed Traffic Information to the EV97 as, "…traffic believed to be you has traffic north west, half a mile, tracking east, indicating 300ft above". The EV97 pilot reported that he was visual with the C152 and descending.

At 13:49:55 (Figure 3), the two aircraft were at their closest point with the C152 passing approximately 700ft overhead the EV97. At this time, although he had not received traffic information, the C152 pilot reported visual with the EV97.

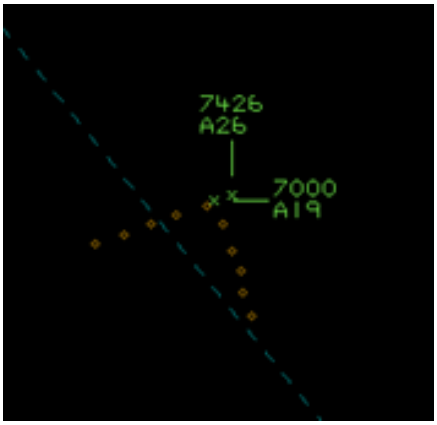


Figure 3: Geometry at 13:49:55

The Shawbury Zone controller was not required to pass Traffic Information to either aircraft under Basic Service; however, his actions in doing so may have facilitated the EV97 pilot's visual acquisition, and avoidance of, the conflicting C152. Given the short timescale, having passed Traffic Information to the EV97 pilot and ascertained that he was visual with the C152, there was not sufficient opportunity to pass Traffic Information to the C152 prior to the pilot volunteering that he was visual with the EV97.

UKAB Secretariat

The EV97 and C152 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard[1]. If the incident geometry is considered as converging then the C152 pilot was required to give way to the EV97[2].

Summary

An Airprox was reported when an EV97 and a C152 flew into proximity at 1349 on Monday 3rd July 2107. Both pilots were operating under VFR in VMC, the C152 pilot in receipt of a Basic Service from Shawbury LARS and the EV97 pilot in the process of establishing a Basic Service with Shawbury LARS.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from the pilots of both aircraft, transcripts of the relevant RT frequencies, radar photographs/video recordings, reports from the air traffic controllers involved and reports from the appropriate ATC and operating authorities.

The Board first looked at the actions of the EV97 pilot. He had called Shawbury for a Basic Service and could hear that they were busy, so straight away was alerted to the high volume of traffic in the area and looking-out. The Shawbury controller gave him Traffic Information at the same time that he saw the C152, and he was able to take effective avoiding action which dramatically increased the amount of separation from 300ft about 30 seconds before, to 700ft at CPA. For his part, the C152 pilot was also receiving a Basic Service from Shawbury. The controller was not able to give him Traffic Information directly, but the Board thought that it was likely that the pilot heard the information given to the EV97 pilot, which also cued him to look out for traffic. When he did see the EV97 he was content with the separation and assessed that no avoiding action was necessary on his part.

The Board noted that neither aircraft was fitted with a CWS, and the merits of electronic conspicuity were discussed, especially given the more affordable cost of some equipment now on the market. In this instance, both aircraft were transponder equipped, and a CWS would likely have given a warning about this and other traffic operating in the area.

The Board then looked at the actions of the Shawbury Zone controller, and commended him for his timely and accurate Traffic Information to the EV97 pilot even though he hadn't yet identified the aircraft or placed it under an ATS. Notwithstanding, the Board cautioned pilots against believing that they would be given Traffic information as a matter of course under a Basic Service; in this case the controller had probably noticed the EV97 because he was looking for him on radar as the pilot contacted him. However, under a Basic Service there was no requirement for the controller to maintain radar surveillance or establish track identity.

In assessing the cause of the Airprox, the Board agreed that this had been a late sighting by both pilots. Although the EV97 pilot had been concerned by the proximity of the two aircraft, members considered that his timely avoiding action had reduced the risk to the point where the Board considered that normal safety standards and parameters had been achieved; Category E.

[1] SERA.3205 Proximity.
[2] SERA.3210 Right-of-way (c)(2) Converging.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A late sighting by both pilots.

Degree of Risk: E.

Safety Barrier Assessment[3]

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

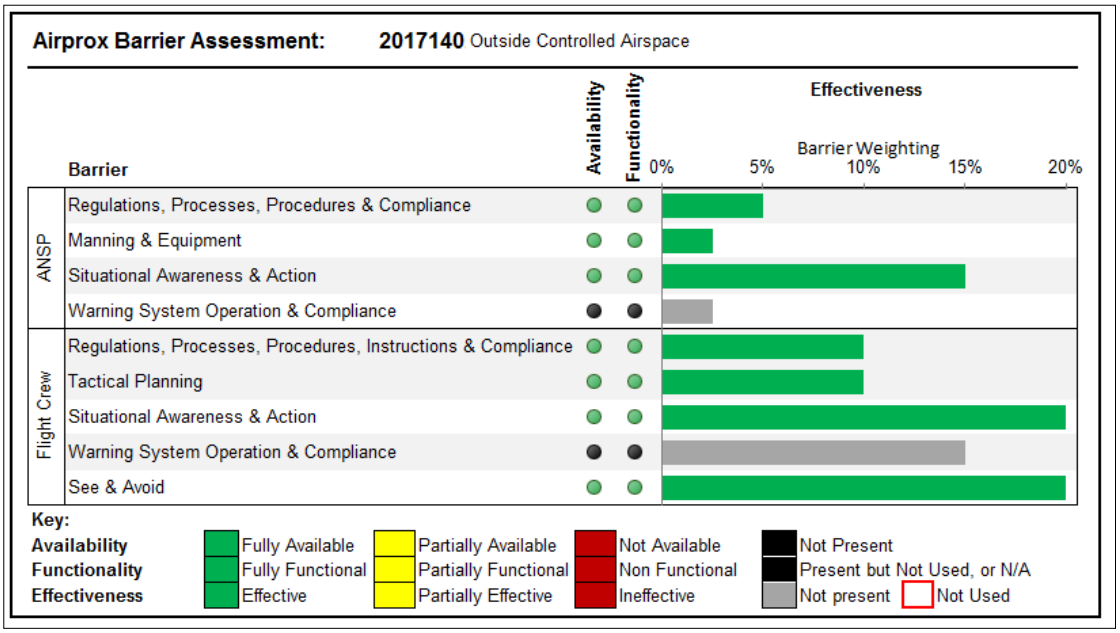
ANSP

Situational Awareness & Action was assessed as **fully effective** because the LARS controller passed Traffic Information to the EV97 pilot.

Flight Crew

Warning System Operation and Compliance was assessed as **not present** because neither aircraft was fitted with a CWS.

See and Avoid was assessed as **fully effective** because the EV97 pilot took timely and effective avoiding action.



[3] The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the UKAB Website.