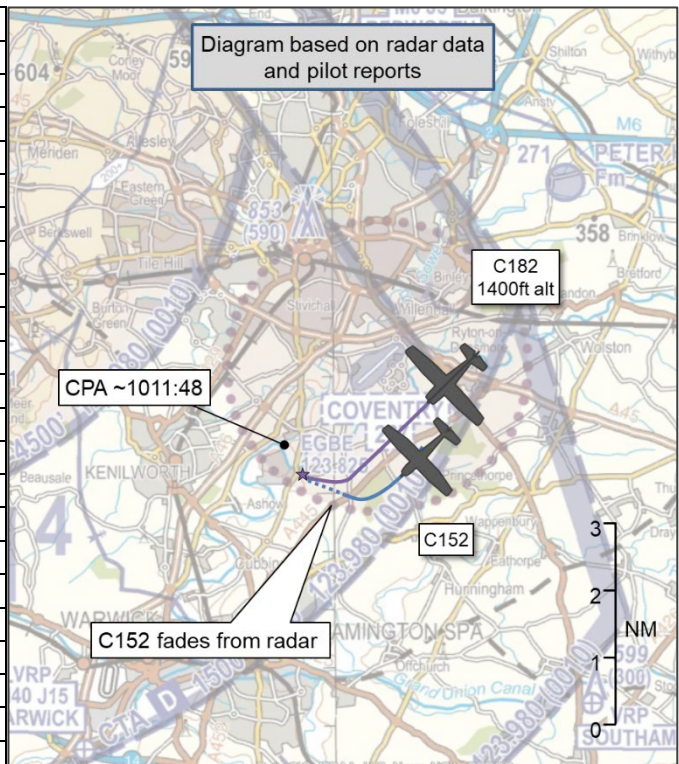


**AIRPROX REPORT No 2020094**

Date: 08 Aug 2020 Time: 1012Z Position: 5222N 00128W Location: Coventry

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

Recorded	Aircraft 1	Aircraft 2
Aircraft	C152	C182
Operator	Civ FW	Civ FW
Airspace	Coventry ATZ	Coventry ATZ
Class	G	G
Rules	VFR	VFR
Service	AFIS	AFIS
Provider	Coventry	Coventry
Altitude/FL	NK	1400ft
Transponder	Not fitted	A, C
<b>Reported</b>		
Colours	Blue, White	White, Blue
Lighting	Strobe, Nav	Nav, Strobes
Conditions	VMC	VMC
Visibility	>10km	CAVOK
Altitude/FL	1000ft	1000ft
Altimeter	QNH (1021hPa)	QNH
Heading	320°	320°
Speed	80kt	90kt
ACAS/TAS	Not fitted	Not fitted
<b>Separation</b>		
Reported	100ft V/30m H	NK
Recorded	NK	



**THE C152 PILOT** reports that on an instructional sortie in the visual circuit, a C182 was also in the visual circuit behind the C152, but gradually catching up on every circuit. The AFISO kept advising the other pilot about traffic ahead and the pilot acknowledged each time. The C152 instructor was demonstrating an approach to the student, setting up for the approach on base leg with one aircraft ahead on final. As requested by the AFISO, because of the one ahead, they reported turning base, a few seconds later the C182 pilot also reported turning onto base and was asked by the AFISO whether they had the C152 in sight, to which they replied “negative”. On hearing the exchange, the Instructor looked back and spotted the C182 in their 4 o’clock position, initiating the approach set-up and catching up rapidly as they also set up their approach and slowed down. They were unable to communicate so the instructor rapidly increased their descent and power, keeping an eye on the C182 all the time. It then crossed from their 4 o’clock to the 11 o’clock approximately 200ft above. They were now able to communicate that they had the C182 in sight and were making a rapid descent. The C182 pilot reported going around and the C152 pilot was able to recover the approach.

The pilot assessed the risk of collision as ‘High’.

**THE C182 PILOT** reports joining the Coventry circuit on right-base for RW05, from the Southam VRP. A number of circuits were flown at 1300ft QNH, (1000ft above aerodrome level) conducting multiple touch-and-go and go-around approach on RW05. Each time they reported downwind and, at the appropriate time, turned onto right-base to initiate the approach, starting the descent after establishing on base. When on the 3rd or 4th circuit, they heard another pilot calling downwind ahead of them. Although they tried to see the aircraft and establish its exact position in relation to their position, they were unable to make visual contact and believed that it was well ahead. Once established on right-base they heard the other pilot reporting that they had an aircraft flying above them. As the C182 pilot was unable to make visual contact with the other aircraft, they immediately initiated a go-around and turned right on runway heading. They then looked behind and for the first time sighted the other aircraft on right-base behind and below them.

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

**THE COVENTRY AFISO** reports that their recollection of the incident was that the visual circuit was active with two aircraft (the C152 and C182) and one aircraft joining from Southam VRP to report on right-base. The C152 pilot reported downwind for a touch-and-go and was told to report turning right-base as there was inbound traffic routing from Southam VRP to report on right-base. The C152 pilot acknowledged the information and said they would report turning right-base and were looking out for the traffic. Shortly afterwards the joining traffic reported short final for a full stop landing, just over the RW05 numbers. The C152 pilot then reported turning right-base, visual with the aircraft ahead on short final. The AFISO asked the C152 pilot to report final as there was plenty of time for the joining traffic who had now landed, to vacate the runway and taxi back to parking. The C182 pilot then reported downwind and was asked to report final and told that there was one ahead. The C182 pilot acknowledged the information and continued downwind. After a few seconds the C182 turned right-base. On seeing this, the AFISO asked if the pilot was visual with the one ahead already on right-base to which the reply was negative. The AFISO believed that on hearing this call the C152 pilot then spotted the aircraft flying approximately 200ft above in the 4 o'clock position. The C152 pilot then reported descending and reported watching the C182 pass through their 11 o'clock. At the same time the pilot of the C182 stated that they were going around as they were not visual with the C152. They were observed to maintain their current height whilst going around and requested to report downwind. The AFISO informed the C152 pilot that the C182 was going around, they acknowledged the go around traffic, which was now ahead, and continued the circuit without further incident.

## **Factual Background**

The weather at Coventry, provided by the AFISO, was as follows:

03011KTS 9999 FEW012 27/17 Q1021

The weather at Birmingham was as follows

METAR EGBB 080950Z 02009KT 9999 SCT023 23/17 Q1022=

## **Analysis and Investigation**

### **CAA ATSI**

An Airprox was reported by the pilot of a C152 with a C182 whilst both were flying circuits at Coventry Airport. The timecode for the Coventry RTF was found to be faulty, and so references to time must be considered to be accurate only to within 5-10 seconds, as they have had to be aligned with the situation presented on the area radar replay, utilising the position reports of other aircraft. Also, the C152 was not transponding, and a contact believed to be it was only detected by the area radar when the aircraft was downwind.

At 1010:37 the C152 pilot reported downwind for a touch-and-go (Figure 1).

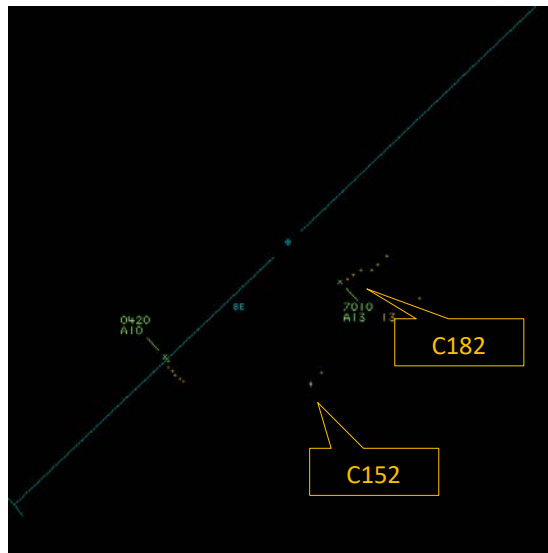


Figure 1 – 1010:37

The AFISO dealt with another aircraft on the ground before replying at 1010:48 “(c/s) roger, report turning right base, traffic ahead is a C172 last reported on right-base” which was acknowledged by the pilot of the C152. (The C172 had rejoined from the north-east and had been requested to report at the Southam VRP to the south-east of the airfield). The C182 was also at the beginning of the downwind leg but flying a pattern inside the C152. Note - the radar return for the C152 had started to become intermittent on the radar replay (Figure 2).

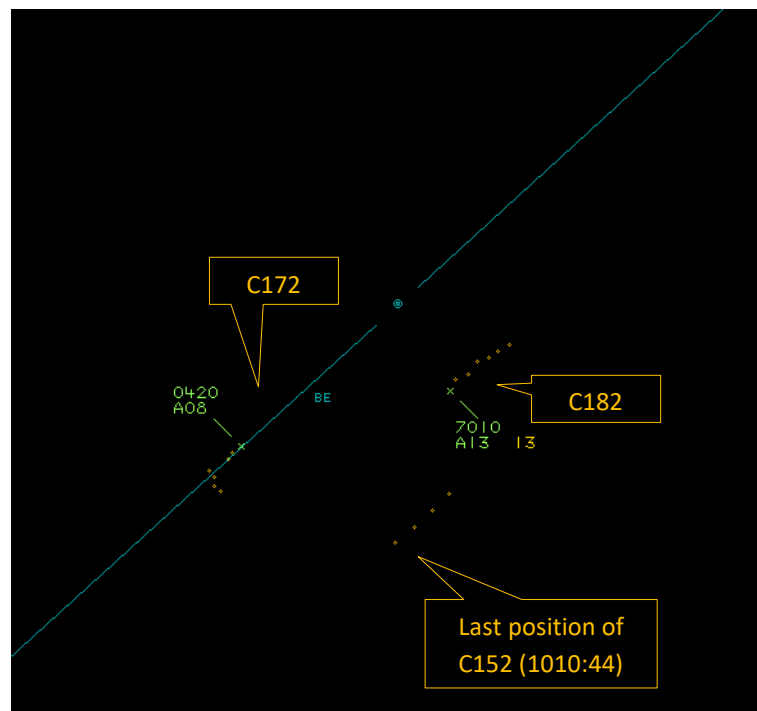


Figure 2 – 1010:48

At 1011:15 the C182 pilot reported “late downwind”. The AFISO requested them to “report final, you have one ahead” which was acknowledged (Figure 3).

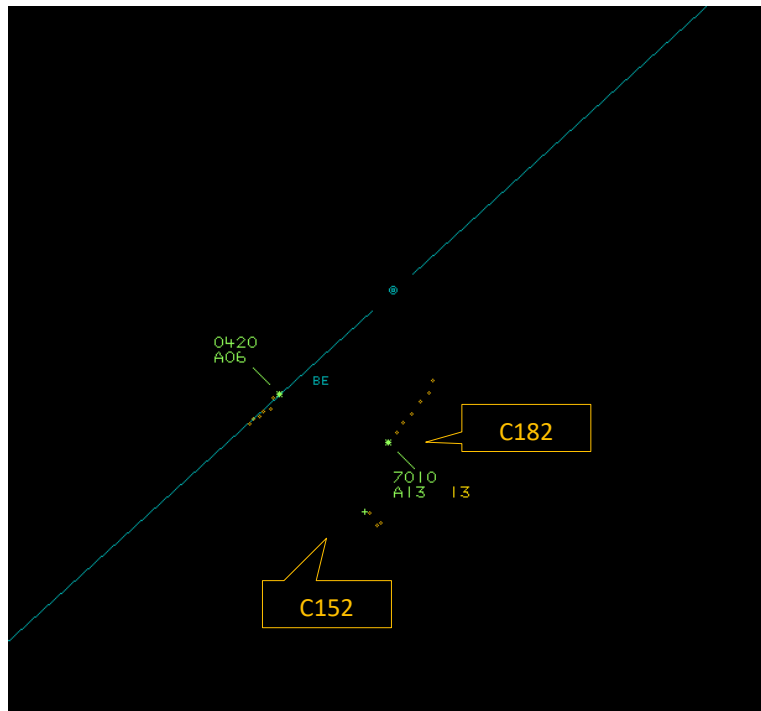


Figure 3 – 1011:15 (C152 subject to radar jitter)

The C152 reported turning onto base leg at 1011:25 and was requested to report final which was acknowledged by the pilot (Figure 4).

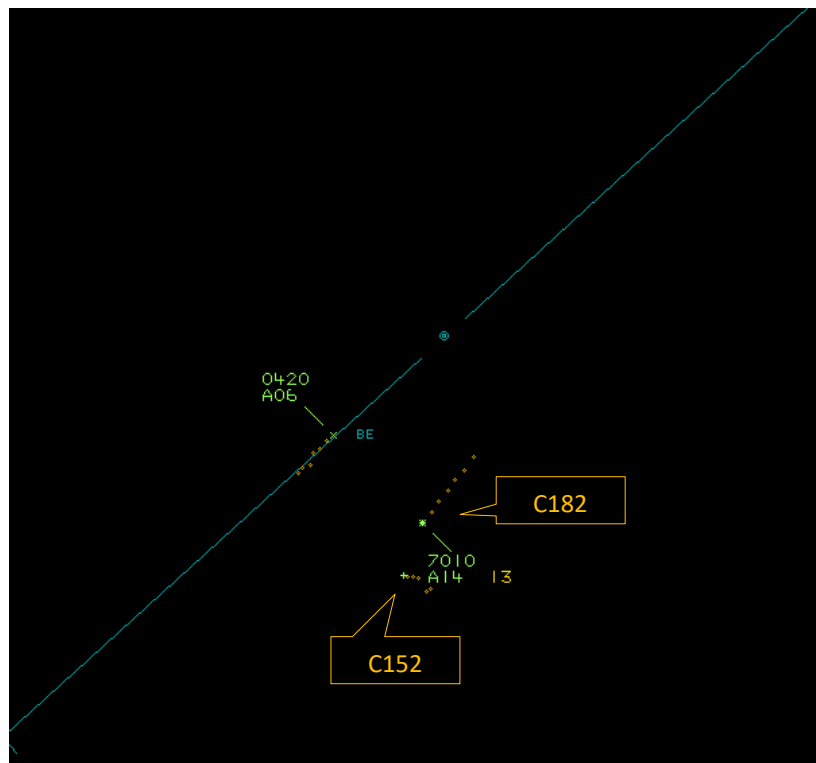


Figure 4 – 1011:25

At 1011:48 the C152 pilot reported “we’re visual with the (C182 c/s) who is now flying pretty much overhead us on base”. The radar replay was unable to accurately show the relative positions of the C152 and C182, with both now being detected intermittently likely due to their decreasing heights. The contact believed to be the C152 was not seen again until much later.

The C182 pilot then reported right-base at 1011:57 to which the AFISO replied “roger you have one ahead also on right-base, are you visual?” The C182 replied at 1012:10, “looking, (c/s) going

around". The pilot of the C152 then advised that they *"had to do a rapid descent because they [the C182] literally just came overhead us"*. The AFISO advised them that that aircraft was going around. CPA could not be determined using the radar replay.

The pilot of the C152 in their written report stated that they had been in the circuit with the C182 and that it was *"catching up with every circuit"*. The pilot of the C182 reported that they *"heard another aircraft calling downwind ahead of us. Although we tried to see the aircraft and establish its exact position in relation to our position we were unable to make visual contact and believed that it was well ahead of us"*. They reported not seeing the C152 until after they had passed it.

CAP797 The Flight Information Service Officer Manual states in Section 1, Chapter 1 - Service provision by FISOs – Responsibility:

1.12 FISOs may issue advice and shall issue information to aircraft in their area of responsibility, useful for the safe and efficient conduct of flights.

1.13 FISOs are not permitted to issue instructions, except for those circumstances in paragraph 1.14, or when relaying a clearance from an air traffic control unit. Pilots therefore are wholly responsible for collision avoidance in conformity with the Rules of the Air.

Adequate Traffic Information was always provided by the AFISO at the appropriate times during this event, based on the calls made by the pilots. The Airprox took place in Class G airspace, where ultimately, regardless of the type of ATS being provided, both pilots were responsible for their own collision avoidance.

### **UKAB Secretariat**

The C152 and C182 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> 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>2</sup>

### **Summary**

An Airprox was reported when a C152 and a C182 flew into proximity in the Coventry visual circuit at approximately 1012Z on Saturday 8<sup>th</sup> August 2020. Both pilots were operating under VFR in VMC, and both were in receipt of an AFIS from Coventry.

### **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 AFISO 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.

Due to the exceptional circumstances presented by the coronavirus pandemic, this incident was assessed as part of a 'virtual' UK Airprox Board meeting where members provided a combination of written contributions and dial-in/VTC comments.

The Board first discussed the actions of the C182 pilot. The pilot had been told by the AFISO about the C152 ahead, however was not visual with it and gradually caught it up. Members acknowledged that the C182 was faster than the C152, but noted that it was for the C182 pilot to integrate with the other circuit traffic ahead, and that because they were not visual with it, they continued to a point where they overflew the C152 on right-base (**CF1**). Once they had been told about the aircraft ahead, and knowing they were not visual with it, the pilot should have adapted their plan in order to ensure separation, (**CF2**,

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

<sup>2</sup> SERA.3225 Operation on and in the Vicinity of an Aerodrome.

**CF3, CF4**). Members noted that the C182 pilot could have taken a number of actions, including but not exclusively, slowing down or adapting their own circuit until visual, or asking for further information either from the AFISO, or from the C152 pilot (**CF7**) rather than continuing and hoping that they would become visual eventually. Therefore, members wondered whether the pilot had assimilated just how close they were to the C152, (**CF5, CF6**). They noted that this was an instructional sortie and some members opined that the instructor should have taken action to ensure that the student had adequate separation and not allowed the situation to continue to the point of Airprox (**CF8**). Finally, the C182 crew did not see the C152 until after they had overflown it, therefore they were not able to take any avoiding action to increase the separation until the go-around, which took place after the event (**CF10**).

Turning to the C152 pilot, they were aware that the C182 was in the circuit behind them; there was also an aircraft ahead, so they were told to report on base and needed to arrange their own flight to integrate with the one ahead. Once they heard the exchange between the AFISO and the C182 pilot, they looked behind and saw the C182 approaching, which by its nature was late (**CF11**) but were then able to take action by turning and descending. The Board thought that there was little more they could have done in the circumstances, and commended the C152 pilot for their awareness.

The Board briefly looked at the actions of the AFISO, they were not required to integrate the aircraft in the circuit, but the Board commended them for their Traffic Information and for their action in asking the C182 pilot whether they were visual, which in turn alerted the C152 pilot to its presence.

In determining the risk, members quickly agreed that the action taken by the C152 pilot had undoubtedly averted a much closer encounter, but they assessed that safety had still been much reduced (**CF9**) and accordingly they assessed the risk as Category B.

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

#### **Contributory Factors:**

2020094			
CF	Factor	Description	Amplification
<b>Flight Elements</b>			
<b>• Regulations, Processes, Procedures and Compliance</b>			
1	Human Factors	• Flight Operations Documentation and Publications	Regulations and/or procedures not complied with
<b>• Tactical Planning and Execution</b>			
2	Human Factors	• Insufficient Decision/Plan	Inadequate plan adaption
3	Human Factors	• Action Performed Incorrectly	Incorrect or ineffective execution
4	Human Factors	• Monitoring of Other Aircraft	Did not avoid/conform with the pattern of traffic already formed
<b>• Situational Awareness of the Conflicting Aircraft and Action</b>			
5	Contextual	• Situational Awareness and Sensory Events	Pilot had no, late or only generic, Situational Awareness
6	Human Factors	• Understanding/Comprehension	Pilot did not assimilate conflict information
7	Human Factors	• Lack of Communication	Pilot did not request additional information
8	Human Factors	• Mentoring	
<b>• See and Avoid</b>			
9	Contextual	• Near Airborne Collision with Aircraft, Balloon, Dirigible or Other Piloted Air Vehicle	Piloted air vehicle
10	Human Factors	• Monitoring of Other Aircraft	Non-sighting or effectively a non-sighting by one or both pilots
11	Human Factors	• Monitoring of Other Aircraft	Late-sighting by one or both pilots

Degree of Risk: B.

Safety Barrier Assessment<sup>3</sup>

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

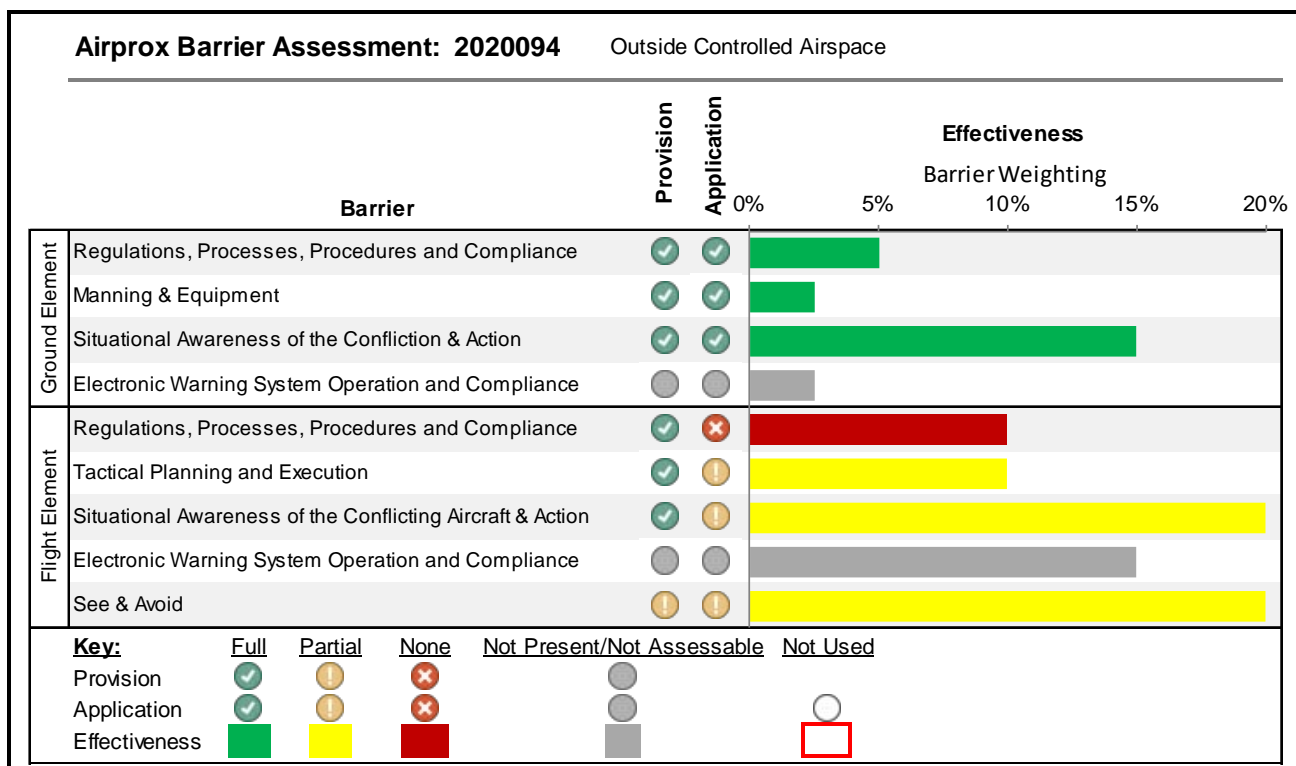
**Flight Elements:**

**Regulations, Processes, Procedures and Compliance** were assessed as **ineffective** because the C182 pilot did not conform with the pattern of traffic formed by the C152.

**Tactical Planning and Execution** was assessed as **partially effective** because the C182 pilot did not adapt the plan once it became apparent they were not visual with the traffic ahead.

**Situational Awareness of the Conflicting Aircraft and Action** were assessed as **partially effective** because the C182 pilot could have taken action to address the fact that they weren't visual with the C152 prior to overflying it.

**See and Avoid** were assessed as **partially effective** because it was a late sighting by the C152 pilot and a non-sighting by the C182 pilot.



<sup>3</sup> The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).