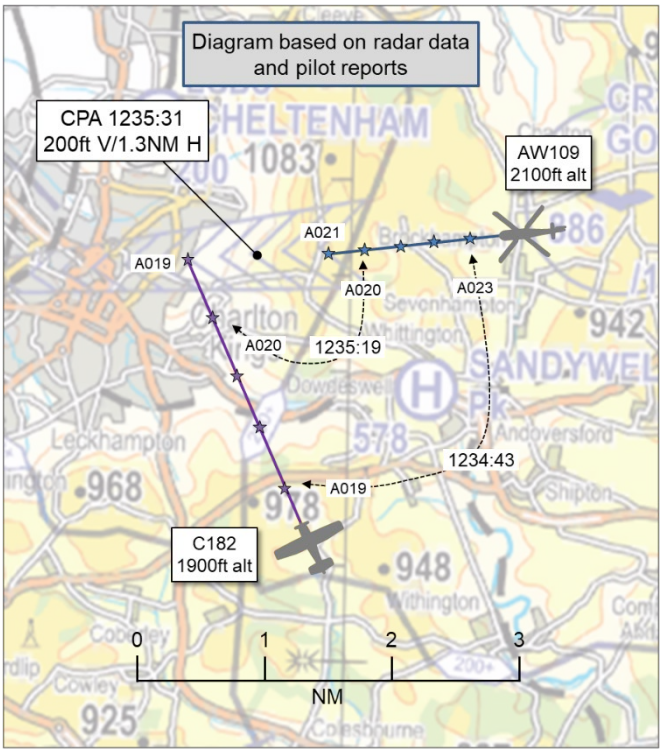
AIRPROX REPORT No 2023165

Date: 30 Jul 2023 Time: 1236Z Position: 5154N 00201W Location: 1NM East of Cheltenham

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	AW109	C182
Operator	Civ Comm	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	IFR	VFR[1]
Service	Procedural	Basic
Provider	Gloucester App	Brize Radar
Altitude/FL	2100ft	1900ft
Transponder	A, C, S	A, C, S+
Reported		
Colours	Grey	White/Blue
Lighting	Landing, Anti-Col, Position	Navigation, Strobes, Beacon
Conditions	IMC	VMC[1]
Visibility	<5km	>10km[1]
Altitude/FL	2000ft	2072ft
Altimeter	QNH (1006hPa)	QNH
Heading	264°	335°
Speed	100kt	143kt
ACAS/TAS	TAS	SkyEcho
Alert	TA	None
Separation at CPA		
Reported	0ft V/<0.5NM H	NK V/NK H
Recorded	200ft V/1.3NM H	



THE AW109 PILOT reports that they had been on an instrument training flight with planned routeing […] intending to fly an RNP approach to RW27 at Gloucestershire. The weather had been poor with a frontal system and cloud in the area. Departure cloudbase had been around 600ft AGL and destination cloudbase at 500ft AGL. As the route had been from the east, NIRMO had been the designated Initial Approach Fix, rather than the Intermediate Fix had it been approached from the west. The aircraft received a Traffic Service on departure […], squawking 4505, on transferring to Gloucestershire the service had been downgraded to a Procedural Service and the squawk reverted to 2000 – IFR conspicuity. On leaving NIRMO, the aircraft descended to 2000ft in accordance with the approach profile. As the aircraft had approached BJ27F (the Final Approach Fix) the Approach controller at Gloucestershire advised of a "Cessna 182, working Brize, transiting south to north approximately 5 miles east of Gloucester at 2000ft." Almost exactly where the AW109 had been. Simultaneously, the TCAS gave a "Traffic, Traffic" audio and a yellow icon appeared on the screen – until this point there had been no icon visible to warn of impending confliction. The AW109 pilot immediately took control of the aircraft from the student and turned hard left advising ATC that they were breaking off the approach due to conflicting traffic. The pilot recalls the conflicting aircraft icon on TCAS being superimposed on their aircraft and had assumed that the aircraft had been extremely close, in thick cloud and at the same altitude. They deemed the risks to be obvious. Subsequently, the AW109 pilot had spoken on the landline with both Brize Norton and Gloucester controllers and ascertained that the conflicting aircraft, that had been receiving a Basic Service from Brize, had been the C182, registration […] and en route to […]. Whilst accepting that the approach track to [Gloucester] is in Class G "Open FIR" airspace, they question[ed] the wisdom of a pilot transiting through a designated approach path, denoted with

[1] Reported as VFR/VMC but the AW109 was in cloud at CPA and the Gloucester METAR reported OVC015.

"feathers" on aeronautical charts[2] (but not necessarily on SkyDemon charts) whilst receiving a minimal service from a different ATCU. They further questioned the wisdom of flying that transit in thick cloud, definite IMC, at 800ft below the MSA. They believe that the planned routeing of the Cessna pilot, allied to a very late advice message from Brize to Gloucester ATC all contributed to a very serious risk of a mid-air collision.

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

THE C182 PILOT reports flying on a direct track between […] and […] with autopilot engaged on both direction and altitude hold. Both pilot and passenger had been looking out for other aircraft but nothing seen, and nothing visible on ADS-B [TAS] via [moving map display], and nothing alerted or heard via radio. The pilot reported only having become aware of an Airprox when alerted via email, and therefore no action had been taken at the time. The weather at the time had been IMC further south, but cleared up with no cloud as they travelled north. Although the pilot cannot remember exactly where the clouds had cleared, their memory is that it had been further south of this [event].

THE GLOUCESTER CONTROLLER reports that the AW109 had been conducting an IAP to RW27 in IMC. The pilot reported an aircraft in confliction but made no mention of intent to raise an Airprox at the time (they noted that they wanted to talk to the Brize Norton Supervisor first). At 1643 the AW109 finished their last approach and returned to [destination airfield] and [reports] having filed an Airprox.

THE GLOUCESTER SUPERVISOR reports that this had been a fully staffed day. The controller had been on day 3 of a 3-day cycle, their shift had started at 0930 and they had been on frequency since 1200. Traffic levels had been assessed as low. The controller had been given a break after the incident and the relevant basic details gained as per this report.

At 1228 the AW109 had requested a Procedural Service and an RNP approach via NIRMO. The controller informed the pilot information V, Procedural Service and cleared [them for an] RNP approach RW27 QNH1010 to report at NIRMO. The controller then gained the training intentions of the pilot and issued go-around instructions.

At 1232 the AW109 had been at NIRMO, the pilot had been told to report FAF, RW27 […].

At 1234 another aircraft had been given clearance to land at Heli North but had been no factor to this event.

At 1235 the AW109 pilot [had been told] that traffic not on frequency but crossing the final approach track 5NM east, northbound last reported at 2000ft, had been a C182. The AW109 pilot acknowledged, broke-off the approach and had reported "coming hard left now".

At 1236 the AW109 pilot reported that they had been going to go round again and reposition at NIRMO, recalling that "they had been less than a mile at 2000ft and on TCAS". The Gloucester controller informed the AW109 pilot that the traffic had been working Brize Radar and they had just called [on the landline] about it.

The controller instructed the AW109 pilot to report at 3000ft and on track to NIRMO. The pilot asked if they [Gloucester Radar] could give someone a call about crossing the final approach track with another aircraft on it.

At 1237 the AW109 pilot queried why Brize had been working traffic at the same level as them at the FAF, [and that they] expected Brize to apologise and if they don't get it the AW109 pilot would file an Airprox.

[2] 1:250000 and 1:500000 charts are marked as follows: "Pilots are strongly recommended to contact aerodrome ATSU before flying within 10NM of any aerodrome marked with instrument approach feathers."

At 1238 the AW109 conducted the approach without further incident.

Phone call referenced at 1236 above - Traffic Information Basic Service 5NM SE of the field 2000ft a C182 – the Gloucester controller passed this immediately to the AW109 pilot. The AW109 pilot had then broken-off the approach and the Gloucester controller had told the Brize controller. The Brize controller had noted that their traffic would be ahead […] and had said that they had picked-up the traffic late.

THE BRIZE NORTON CONTROLLER reports that they had been the RA controller working RA/Dir/Zone/LARS bandboxed. Traffic levels had been low, and staffing had been at shift level with 1 extra controller for relief breaks. The C182 pilot had called for a LARS transit and a Basic Service whilst southeast of Kemble, for a transit northwest bound. The controller recalls that they had an airways leaver inbound to Kemble pre-noted from Sector 23. Weather had been predominantly poor leading them to believe that the airways traffic would be Deconfliction Service. The controller had the C182 pilot squawk ident to allow co-ordination to be applied. The airways traffic called leaving the airway inbound to Kemble. The controller completed the required admin and routed them to a different fix for an RNAV [approach] to Kemble due to conflicting traffic. The airways traffic had then been vectored into the CTR for separation against unknown traffic crossing the approach lane. During this time, the C182 had transited NW bound to approximately 4NM SE of Gloucester with traffic [the AW109] in their vicinity squawking IFR. Traffic Information had been given to the C182 pilot who had been about 1NM west and 100ft below the IFR traffic, and a call had been given to Gloucester for Traffic Information, albeit later than normally done.

The Brize Norton controller perceived the severity of the incident as 'Low'.

Factual Background

The weather at Gloucester/Staverton was recorded as follows:

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METAR EGBJ 301220Z 20007KT 5000 RA BKN005 OVC015 17/16 Q1010=
METAR EGBJ 301250Z 21003KT 5000 -RA BKN005 OVC015 17/16 Q1010 RERA=
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Analysis and Investigation

Military ATM

An Airprox occurred on 30th July 23 in the vicinity of Gloucester. The AW109 [pilot] had been conducting an instrument training flight with an RNP approach to Gloucester RW27 in receipt of a Procedural Service from Gloucester Approach. The C182 [pilot] had been conducting a VFR transit flight in receipt of a Basic Service from Brize Norton Approach.

Utilising occurrence reports and information from the local investigation, outlined below are the key events that preceded the Airprox. Where available they are supported by screenshots to indicate the positions of the relevant aircraft at each stage. The screenshots are taken from NATS radars only and as NATS radars are not available to the controllers they may not be entirely representative of the picture available.

The Brize Norton Approach controller had been operating with the Approach, Director, Zone and Lower Airspace Radar Service positions all bandboxed, as per local orders for weekend operations. In addition to the shift personnel of one Visual Control controller and one Approach controller, an additional controller was rostered to provide breaks and additional Approach control capacity as required.

Traffic levels were low at the point of the Airprox with the C182 the only LARS traffic and a Falcon 900 departing airways inbound Kemble via an RNP approach. The additional Approach controller was initially on a break and not within the Approach Control room but returned during the period preceding the Airprox.

Sequence of Events

At 1225:35, the C182 pilot contacted the Brize Norton Approach controller. Initially the C182 pilot had been told to standby and remain clear of controlled airspace, as the Brize Norton Approach controller was receiving a prenote from Swanwick Sector 23 regarding a Falcon 900 departing airways inbound Kemble.

At 1226:11, following completion of the prenote from Swanwick Sector 23, the Brize Norton Approach controller instructed the C182 pilot to pass their message. The C182 pilot requested both a Basic Service and Fairford MATZ penetration, along with providing their routeing inbound [destination airfield]. The Brize Norton Approach controller subsequently proceeded to inform the C182 pilot that the Fairford MATZ had been inactive, provide a Basic Service with associated Brize Norton QNH and confirm the intended routeing.

Aware of the expected Kemble inbound, and in anticipation of that aircraft requiring a Deconfliction Service, the Brize Norton Approach controller requested the C182 pilot to maintain not above 2000ft QNH for their transit. The C182 complied with this request, agreeing to maintain not above 2000ft on Brize Norton QNH 1010.

The sequence of transmissions regarding the C182's routing and transit level concluded at 1229:40.

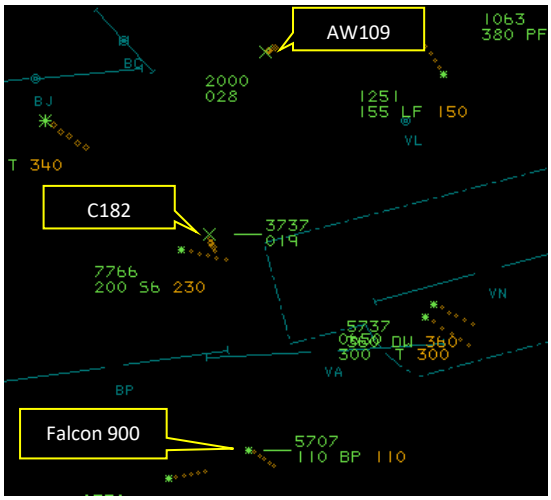

Figure 1 (1231:46). Position of the AW109 and C182 when the Falcon 900 contacted the Brize Norton Approach controller.

At 1231:46, the Falcon 900 [pilot] previously prenoted by Swanwick Sector 23 contacted the Brize Norton Approach controller. Initial contact was made on the incorrect frequency, requiring an immediate frequency change. At 1232:29, the Falcon 900 [pilot] had been issued a descent from FL110 to 3500ft Brize Norton QNH and provided with a Deconfliction Service.

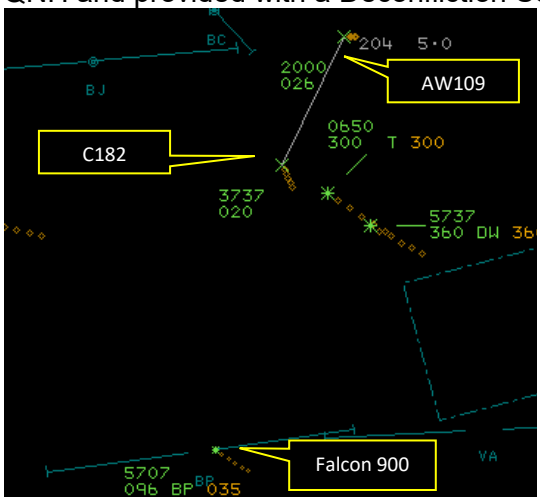

Figure 2 (1233:38). Separation between the C182 and AW109 fell below 5NM laterally.
(Separation: 600ft V/5.0NM H)

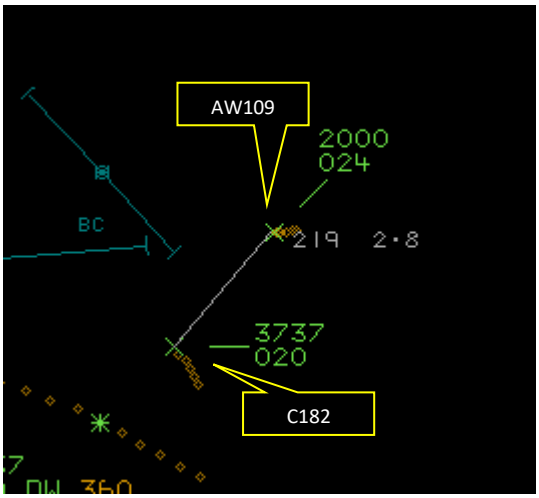

Figure 3 (1234:40). Brize Norton Approach controller commenced a landline call with Kemble regarding the Falcon 900 RNP approach.
(Separation: 2.8NM)

As a result of the unknown traffic operating in the vicinity of Kemble and the Falcon 900 pilot's Deconfliction Service, the Brize Norton Approach controller informed the Falcon 900 pilot of an amended RNP approach path. At 1234:40, the Brize Norton Approach controller informed Kemble of the inbound and the amended routeing.

The landline call with Kemble concluded at 1235:20. During this period the additional Approach controller had re-entered the Approach control room and proceeded to point out to the Brize Norton Approach controller the proximity of the C182 to the AW109.

Whilst making the Brize Norton Approach controller aware of the C182's proximity to the AW109, the additional Approach controller also contacted Gloucester at 1234:52 to inform them of the C182's location and intentions. The limited awareness of the additional Approach controller resulted in this Traffic Information call being protracted as they were attempting to read the Brize Norton Approach controller's flight strips whilst on the landline.

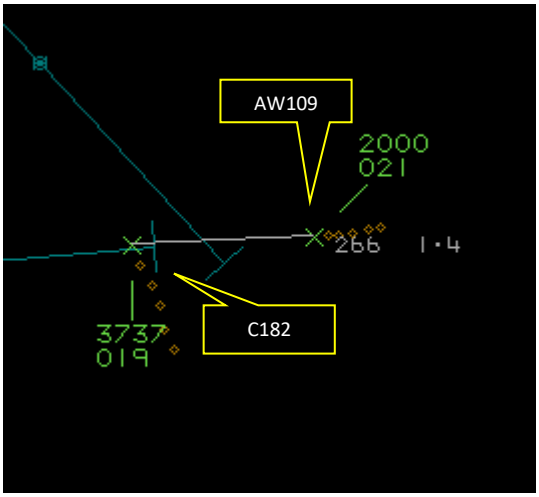

Figure 4 (1235:26). Traffic Information provided to the C182 on the AW109.
(Separation: 1.4NM)

At 1235:26, the Brize Norton Approach controller provided Traffic Information to the C182 [pilot] on the AW109; "*Traffic east, one mile, tracking west, indicating similar level descending*". The C182 [pilot] acknowledged the Traffic Information ; "*copied the traffic, thank you*".

Local BM Investigation

The local investigation conducted by Brize Norton Air Traffic Control was based upon controller recollection and tape transcript data alone as no local radar replays were available. The local investigation found that whilst the Traffic Information call to Gloucester regarding the C182's routeing would have been more beneficial had it been conducted at an earlier opportunity, the Brize Norton Approach controller had prioritised their actions correctly with focus being paid to the Deconfliction Service for the Falcon 900 [pilot].

2 Gp BM Analysis

The Brize Norton Approach controller fulfilled the duties required of them iaw the Basic Service requested by the C182 pilot. Whilst converging, the C182's heading and speed meant that it would pass ahead of the AW109 and therefore no definite risk of collision existed. The prioritisation of ATS to the Falcon 900 [pilot] by the Brize Norton Approach controller was correct iaw the Deconfliction Service being provided and ensured an appropriate approach was enabled. The actions of the additional Approach controller when identifying the C182's proximity to the AW109 and Gloucester RNP approach path were equally justified and aided in situational awareness for the Gloucester Approach controller. Overall, the Brize Norton Approach controller provided a suitable Basic Service ATS provision to the C182 [pilot].

CAA ATSI

The AW109 pilot had first called the Gloucestershire Approach controller at 1228:10, inbound from the east, requesting an RNP approach to RW27. The Gloucestershire Approach controller cleared them for the approach confirming the latest ATIS and QNH and requested a report at the approach fix NIRMO (10.4NM east of the airfield). The C182 pilot had been receiving a Basic Service with RAF Brize Norton and had still been over 16NM to the south, passing to the east of Kemble at that time.

At 1232:25 the pilot of the AW109 reported at NIRMO. The Gloucestershire controller requested a call at the final approach fix and passed the runway surface conditions.

At 1234:55 a telephone call had taken place between a person identifying themselves as *"Brize"* and the Gloucestershire Approach controller, initiated by Brize Norton: *"Brize with Traffic Information"*. The Gloucestershire controller asked them to *"pass your message"* and had been given the following: *"we've just picked up a Basic Service track. They are currently er southeast of yourselves by ... (no recorded data) …."*. The Gloucestershire controller interrupted, at 1235:08 with *"what level?"*. The person at Brize Norton continued *"…. but he has just called us up. He's indicating 2000ft"*.

At 1235:11 the Gloucestershire controller told them to standby and at 1235:13 passed Traffic Information to the pilot of the AW109: *"traffic not working this frequency crossing the final approach track 5 miles east of the field, northbound, last reported altitude 2000ft. It's a C182"*.

The AW109 pilot replied to the Traffic Information at 1235:24 *with "roger, and we're going to break off the approach coming hard left turn"*. Followed by: *"we were less than a mile from that at 2000ft. It popped up on TCAS. It was going straight through NIRMO at 2000ft".*

As the AW109 pilot had transmitted this, the telephone conversation had continued:

(Gloucestershire) *"a C182 did you say?*
(Brize) *"Affirm – current track they will be ahead of your IFR."*
(Gloucestershire) "*Mine's breaking-off the approach turning left."*
(Brize) "*He's breaking off the approach turning left."*

(Gloucestershire) *"Yeah."*
(Brize) *"And what is your IFR traffic sorry?"*
(Gloucestershire) *"It's an AW109. He was on the instrument approach via NIRMO inbound."*
(Brize) *"Roger – we've just picked it up now – it's very late."*
(Gloucestershire) *"That's no problem."*
(Brize) *"Perfect thanks."*

Analysis - ATSI reviewed the reports from both pilots and the Gloucestershire and Brize Norton controllers. An investigation report had been received by ATSI from Gloucestershire, but nothing had been received from Brize Norton. Area radar replay has been used in conjunction with the recorded RTF and telephone call obtained from Gloucestershire. Gloucestershire Airport has a primary radar, but no surveillance services are currently available. A limited picture for situational awareness is available on the ATM in the VCR for use by the approach controller and which is fed by the primary radar. There is no secondary radar feed. The report from the Brize Norton controller indicated that they were using surveillance equipment to provide a LARS.

The Gloucestershire controller would not have been aware of the presence of the C182 but, having been passed Traffic Information by Brize Norton, immediately passed that information on to the pilot of the AW109.

It is not clear why Traffic Information had been passed so late by Brize Norton, or even why the C182 had not been offered to the Gloucestershire Approach controller earlier, especially as its track had been taking it through the Gloucestershire final approach with traffic that could be construed to be making an approach to Gloucestershire also in the area. The AW109 had been transponding code 2000 which indicates that the aircraft had been, amongst other things, IFR.

The telephone conversation between Gloucestershire and Brize Norton appeared to suggest that the Brize Norton controller had only just been contacted by the pilot of the C182: *"we've just picked up a Basic Service track."* However, the written report from the Brize Norton controller indicated that they had first established communications with and confirmed the identity of the C182 whilst it had still been to the south of Kemble, much earlier. This had been corroborated by the radar replay which showed the C182 transponder code changing from 7000 to the Brize Norton Conspicuity code 3737 at 1227:36. The ident feature described in the Brize Norton controller's written report had been subsequently observed at 1228:37.

The pilot of the AW109 apparently responded to a TCAS TA and had elected to break-off the approach with the C182 passing 1.4NM ahead. They had reported being in IMC and the Gloucestershire METAR indicated that the cloud ceiling had been below the AW109 at 1500ft. The AW109 pilot did not report making visual contact with the C182.

The C182 pilot reported being with London Information at the time and believed that the cloud conditions at the time were improving. However, they had not been aware of the presence of the AW109, nor the reported Airprox until notified by UKAB later and so their memory of that period had likely been impaired.

Conclusion - Traffic Information had been passed by the Brize Norton controller to the Gloucestershire Approach controller so late that the pilot of the AW109 believed that the distance between the two aircraft as well as their relative positions and speed had been such that the safety of the aircraft involved may have been compromised.

UKAB Secretariat

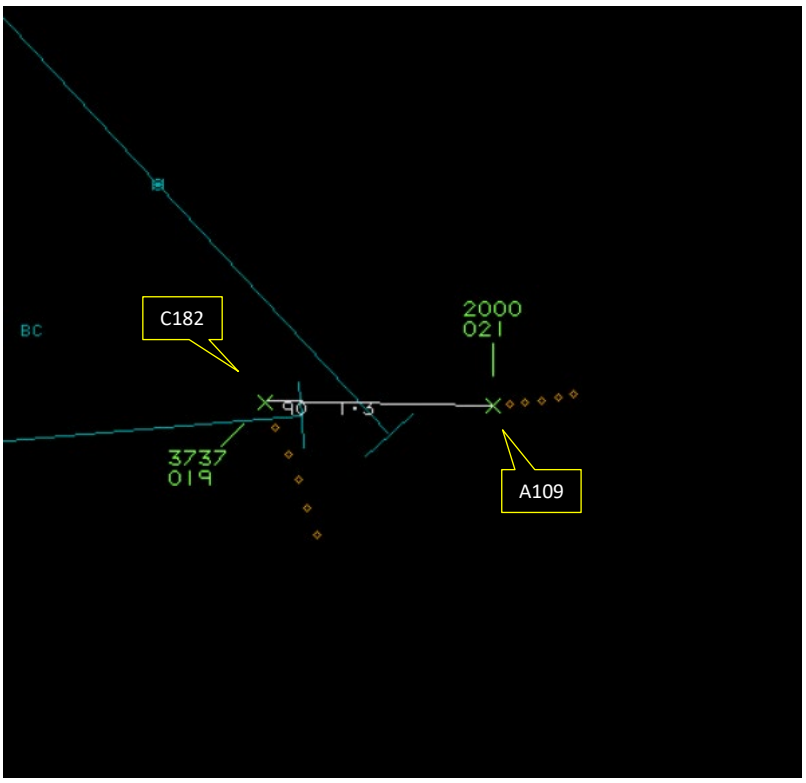

Figure 5 – CPA 1235:31 200ft V/1.3NM H

The AW109 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.[3] If the incident geometry is considered as converging then the C182 pilot was required to give way to the AW109.[4]

Summary

An Airprox was reported when an AW109 and a C182 flew into proximity 1NM east of Cheltenham at 1236Z on Sunday 30th July 2023. The AW109 pilot had been operating under IFR in IMC and in receipt of a Procedural Service from Gloucester, the C182 pilot had reported been operating under VFR in VMC and in receipt of a Basic Service from Brize Norton.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings, reports from the air traffic controllers involved 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 firstly discussed the actions of the AW109 pilot, noting that they had been on an instrument training flight, under a Procedural Service with Gloucester in IMC and that their aircraft had been operating with a serviceable TAS unit. The first call they had received on the presence of the C182 had coincided with a TAS indication (**CF14**) and had appeared to place the 2 aircraft in the same immediate area leading the AW109 pilot to have been concerned by the C182's proximity (**CF12**) and initiating avoiding action. Members considered there was nothing more they could have done in this event, given that information regarding the C182's proximity (via Traffic Information and their onboard TAS) had been received so late.

Turning to the C182 pilot, Board members expressed concern that, although the pilot had reported operating in VMC, the weather had been such that they had in all probability been operating in IMC below safety altitude (**CF7**) albeit with the support of a Basic Service from Brize Norton with all the

[3] UK Reg (EU) SERA.3205 Proximity.
[4] UK Reg (EU) SERA.3210 Right-of-way (c)(2) Converging.

known limitations of that service. They also noted positively that the C182 had been equipped with an electronic conspicuity device but noted that it had not registered any emissions from the AW109 (**CF13**). Members felt that the C182 pilot had potentially made omissions in their pre-flight preparations and that changes in the weather from that expected had led them to be in this position. Members stressed that operating in this area and in these conditions does require the pilot to maintain situational awareness using all possible means and that a higher level Traffic Service (**CF9**), at a higher altitude, and with more appropriate service providers would probably have helped to mitigate this event (**CF10**). They felt that a call to Gloucester (**CF8**) as they had approached would have better enabled the controller to have informed any traffic they had been aware of regarding the C182's passage through the area. The Board agreed that, with both the C182 and the AW109 obscured by cloud (**CF15**), there had been no possibility of visual acquisition by either pilot and, under a Basic Service with Traffic Information passed very late, the C182 pilot had not had any situational awareness of the AW109 (**CF11**).

In considering the role of the Gloucester controller, Board members felt that they had done as much as could have been expected when able to offer only limited air traffic services. They had been unaware of the approaching C182 until extremely late in the event (**CF5**) having received information from Brize Norton much later than could have been expected, and had passed that information immediately to the pilot of the AW109.

Board members went on to discuss the role of the Brize Norton controller. They noted that they had been operating 4 different roles in a bandboxed configuration, but under light traffic conditions and had been devoting their attention to an aircraft leaving the airways (**CF4**), expecting it to be under a Deconfliction Service. Having been contacted by the C182 pilot who had requested a Basic Service (**CF1**), they enabled coordination against the airways leaver and allowed the C182 to progress closer to Gloucester than would normally have happened before coordinating that traffic with Gloucester, making the coordination telephone call and passing Traffic Information to the C182 pilot virtually at the CPA for this event (**CF2**, **CF3**). Although Brize Norton is equipped with STCA-capable displays, the squawk utilised by the C182 pilot sat outwith the select frame and therefore did not alert the Brize Norton controller of an impending confliction with the Gloucester traffic (**CF6**).

When determining the risk, members considered the reports from both pilots together with the report from the controllers involved and radar photographs/video recordings. They agreed that, although the AW109 pilot had been concerned by the proximity of the C182 when triggered by their TCAS display, there had been sufficient lateral separation between the 2 aircraft and there had therefore been no risk of collision and members assigned Risk Category C to this Airprox.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2023165			
CF	**Factor**	**Description**	**ECCAIRS Amplification**	**UKAB Amplification**
	Ground Elements			
	• 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
2	Human Factors	• ANS Traffic Information Provision	Provision of ANS traffic information	TI not provided, inaccurate, inadequate, or late
3	Human Factors	• ATM Coordination	Coordination related issues (external as well as internal)	
4	Human Factors	• Task Monitoring	Events involving an individual or a crew/ team not appropriately monitoring their performance of a task	Controller engaged in other tasks
5	Contextual	• Traffic Management Information Action	An event involving traffic management information actions	The ground element had only generic, late, no or inaccurate Situational Awareness
	• Electronic Warning System Operation and Compliance			

6	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
	Flight Elements			
	• Regulations, Processes, Procedures and Compliance			
7	Human Factors	• Use of policy/Procedures	Events involving the use of the relevant policy or procedures by flight crew	Regulations and/or procedures not complied with
	• Tactical Planning and Execution			
8	Human Factors	• Accuracy of Communication	Events involving flight crew using inaccurate communication - wrong or incomplete information provided	Ineffective communication of intentions
9	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
10	Human Factors	• Insufficient Decision/Plan	Events involving flight crew not making a sufficiently detailed decision or plan to meet the needs of the situation	Inadequate plan adaption
	• Situational Awareness of the Conflicting Aircraft and Action			
11	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
12	Human Factors	• Unnecessary Action	Events involving flight crew performing an action that was not required	Pilot was concerned by the proximity of the other aircraft
	• Electronic Warning System Operation and Compliance			
13	Technical	• ACAS/TCAS System Failure	An event involving the system which provides information to determine aircraft position and is primarily independent of ground installations	Incompatible CWS equipment
14	Contextual	• Other warning system operation	An event involving a genuine warning from an airborne system other than TCAS.	
	• See and Avoid			
15	Contextual	• Visual Impairment	Events involving impairment due to an inability to see properly	One or both aircraft were obscured from the other

Degree of Risk: C.

Safety Barrier Assessment[5]

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 **ineffective** because communication between the Brize Norton and Gloucester controllers had been sub-optimal leading to late Situational Awareness for the Gloucester controller and thus insufficient time for them to warn the AW109 pilot of the C182's proximity.

Electronic Warning System Operation and Compliance were assessed as **not used** because the C182 had been carrying a Brize Norton conspicuity squawk that set it outside the frame of operation of the STCA system.

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

Flight Elements:

Regulations, Processes, Procedures and Compliance were assessed as **ineffective** because the C182 pilot had been operating VFR below the required weather minima.

Tactical Planning and Execution was assessed as **ineffective** because the C182 pilot had not requested an ATS that would have required monitoring of their flight by the Air Traffic Service Unit.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because the C182 pilot had only generic Situational Awareness of where they had been operating leading to the AW109 pilot being concerned by the proximity alert received from their TAS.

See and Avoid were assessed as **not used** because both aircraft had been obscured from the other by weather.