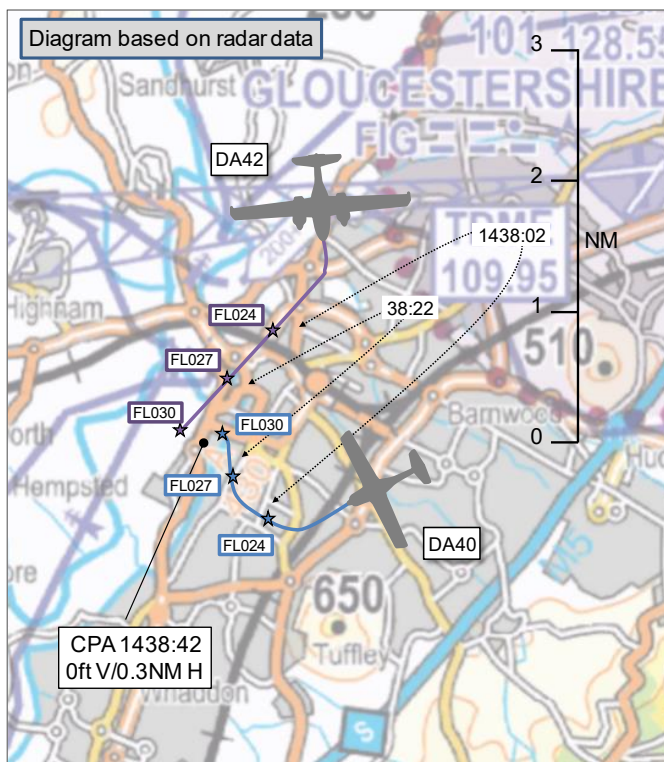


AIRPROX REPORT No 2024203

Date: 12 Aug 2024 Time: 1439Z Position: 5151N 00216W Location: 4.5NM SW Gloucestershire

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	DA40	DA42
Operator	Civ FW	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	IFR
Service	Between Frequencies ¹	Between Frequencies
Provider	Gloster Tower/App	Gloster Tower/App
Altitude/FL	FL030	FL030
Transponder	A, C, S+	A, C, S+
Reported		
Colours	White	White
Lighting	'Full'	Nav, Strobe, Landing
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	2500ft	2900ft
Altimeter	QNH (1007hPa)	SPS (1013hPa)
Heading	220°	225°
Speed	90kt	110kt
ACAS/TAS	TAS	TAS
Alert	Information	Information
Separation at CPA		
Reported	0ft V/700m H	50-100ft V/500m H
Recorded	0ft V/0.3NM H	



THE DA40 PILOT reports that they were the examiner on a flight conducting a skill test for the issue of an initial IR(R) rating. Following on from the approach and a low-level circuit, they requested to depart the circuit to the north of Gloucester for some general handling. On departure from RW22, they were instructed by ATC to continue upwind as there was a DA42 departing to BADIM from RW27, through their level. They noted that they regularly fly from Gloucester to BADIM, so were aware that the track to BADIM was almost a direct track from the runway track of RW22. They questioned this with ATC, explaining that they were being told to head directly SW towards BADIM whilst another aircraft had taken off behind them from another runway, routing IFR direct to BADIM. They were told to continue SW despite this. They thought this had been an unsafe operation by ATC which was why they questioned it. A safer option would have been to give them a left turn to the north or instruct them to turn to the north immediately after departure, thereby overflying the threshold of RW09, mitigating any risk of collision. Approximately 3min after their departure, they were then instructed to turn north by ATC and passed information about the DA42 on departure again. This northerly turn by ATC turned them directly into the path of the DA42 which was, as predicted, turning on-track to BADIM.

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

THE DA42 PILOT reports that they were departing Gloucestershire on an IFR flightplan on a training flight. [The DA40] was cleared to depart off RW22 approximately at 1433, they were then cleared to depart RW27 at 1434. During the departure they were cleared to climb to FL70 on track BADIM, to the southwest, whilst [the DA40] was climbing out on a rough track of 220°. They were visual and aware of the track of the [DA40] aircraft as it presented a potential threat to their cleared track. They believed the other pilot was instructed to maintain heading before eventually being cleared to the north. ATC

¹ Both pilots had been receiving an ACS from Gloster Tower but had been transferred over to Gloster App, the Airprox occurred before either pilot had called on Gloster App frequency.

(Gloucester Tower) handed them over to Approach who gave them a Procedural Service and made both pilots aware of each other, before then instructing [the DA40] to turn towards the north [they recalled]. The DA40 pilot then turned directly onto a conflicting path with their aircraft. Their own aircraft being on the right, had right of way and maintained course. The [DA40] pilot did not maintain safe separation from them during the turn. It appeared that they did not have an effective lookout, or correct SA, as they flew within 0.5NM of [the DA42] before turning to pass behind, as per air law.

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

THE GLOSTER TOWER CONTROLLER reports that the incident began when a DA40 [pilot] conducted a touch-and-go on RW22 with the intention of turning right to the north, VFR. Due to a DA42 departing RW27 IFR, left turn southwest on-track BADIM, the DA40 pilot was instructed to continue upwind until instructed. The pilot then began to make sarcastic comments about the DA42 also departing on a similar track to them. The DA42 then departed RW27 climbing straight ahead (no noise abatement due IFR Departure separation) and then began their turn left on-track BADIM approximately 2 miles west of Gloucester. Once the DA42 was established on a direct track to BADIM, both aircraft were then observed both visually, and on the ATM, following a similar track with approximately 2-3 miles lateral separation between them on the ATM. They then instructed [the DA42 pilot] to report their level (passing 1.5A) and passed the position and level information to [the DA40 pilot]. The DA40 pilot acknowledged the Traffic Information and [the controller] then informed [the DA40 pilot] that they could make their right turn to the north when ready (so as to leave it up to the pilot as to when they felt it was safe to do so). The DA40 was then observed to turn right on track to the northwest on the ATM, and route directly towards the DA42 (not on track to the north as requested). When the DA40 was approximately 1 mile SE of the position symbol of [the DA42] on the ATM, the controller asked if they were visual, to which they replied they were, with another sarcastic comment. After the pilot had confirmed they were visual, they transferred [the DA40 C/S] to Gloster Approach. Gloster Approach then informed them that the instructor had reported their intent to file an Airprox once landed.

Factual Background

The weather at Gloucestershire airport was recorded as follows:

EGBJ 121450Z 20009KT 9999 FEW045 27/20 Q1007=

Analysis and Investigation

CAA ATSI

Both aircraft had been in receipt of an Aerodrome Control Service in the period running up to the Airprox. CPA occurred at 1438:35. The DA40 pilot had been transferred by the Tower controller to Gloster Approach at 1438:15. The DA40 pilot made their initial call to the Approach controller requesting a Basic Service and immediately reporting the Airprox at 1438:50. The pilot of the DA42 had been transferred by the Tower controller to Approach at 1438:25, but had not yet called on the Approach frequency.

The DA40 pilot was on an initial IR(R) assessment flight with an examiner and had completed an RNP approach to RW27, followed by a go-around and VFR low-level circuit right-hand to RW22, which had been agreed prior to the RNP approach.

The pilot of the DA42 (DA42(A)) was also on a training flight and was holding on the ground ready for an IFR departure from RW27. They had originally been given a clearance to turn left after departure to track 225°, climbing to an altitude of 3000ft, with permission to disregard the noise abatement procedure ("On passing the upwind end of the runway (and not before) all departing non-jet aircraft are to execute a 30° right turn. Non-jet aircraft wishing to turn left will then track not less than 294 MAG, until passing 600 FT QFE (or 700 FT QNH) before turning left.") (UK AIP). The clearance was subsequently amended, changing the requirement to track 225°, to a direct routing to their requested waypoint (BADIM), again with no noise-abatement requirements.

A second DA42 (DA42(B)) was flying right-hand circuits on RW22.

The Tower controller was a trainee under instruction from an OJTI and is referred to as the controller throughout this report.

The Gloucestershire Approach controller had a survey helicopter, a transit aircraft, another helicopter, an EC135 inbound for an RNP approach, and a PA28 inbound from the southwest VFR, which the controller had cleared for a straight-in approach downwind right-hand RW22, not below a height of 1500ft.

At 1433:30 the pilot of the DA40 reported on finals for RW22 for a touch-and-go which was approved by the Gloucestershire Tower controller.

At 1434:22 the Gloucestershire Approach controller passed Traffic Information on the imminent departure of the DA42(A) to the PA28 pilot who had reported with 5 miles to run to the airfield, and then transferred the pilot to the Tower controller.

At 1434:27, having previously been given a clearance to line-up and wait RW27, short of RW22, the pilot of DA42(A) was given the following Traffic Information and take-off clearance by the Tower controller:

“(Callsign) traffic 4 miles southwest of the field is a Cherokee - will be joining right-hand downwind for Runway 22 not below height 1500ft. Runway 27, (surface wind) cleared for take-off”.

The DA42(A) pilot acknowledged the Traffic Information and read-back the take-off clearance. No Traffic Information was passed to the pilot on the DA42(B) crossing the upwind end of RW27 in the circuit for RW22 (Figure 1).

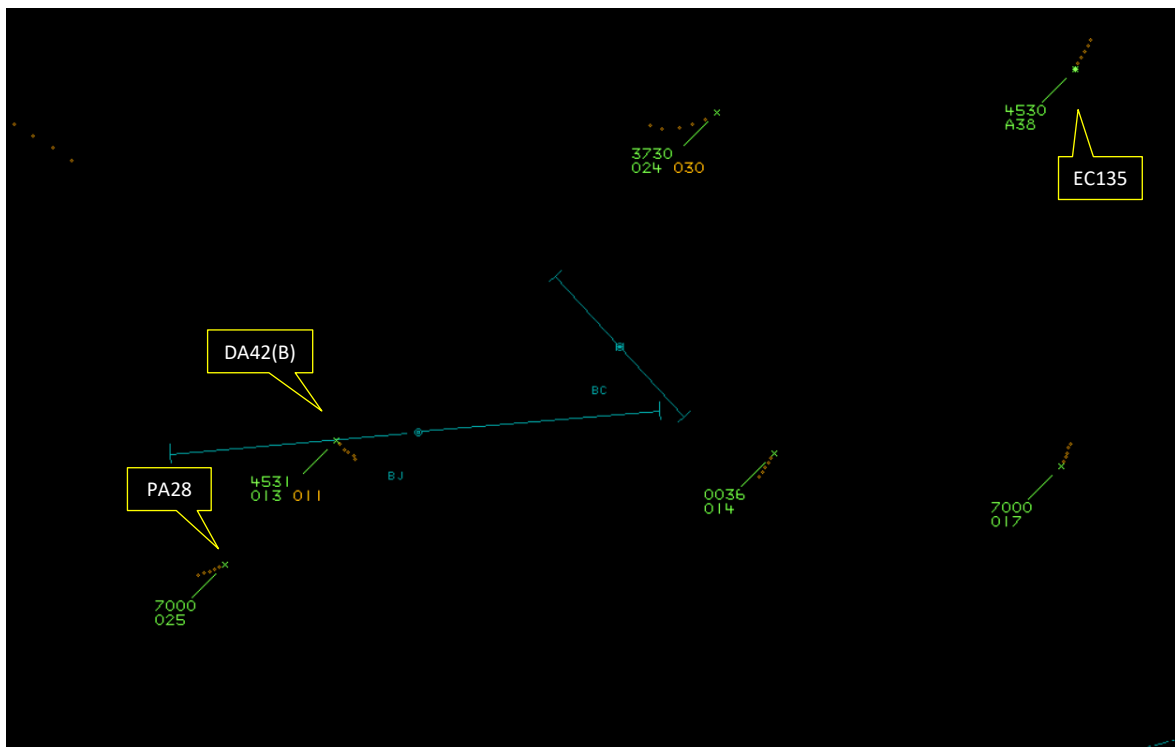


Figure 1 – 1434:27 – levels displayed as FL – add 162ft for altitude.

Not yet visible on the area radar replay, but having completed their touch-and-go to RW22, the pilot of the DA40 was instructed by the Tower controller at 1434:50:

“Continue to extend down, correction, upwind until instructed. Traffic departing Runway 27 to turn left to track to the southwest is a Twin Star”.

The DA40 pilot replied:

“Roger, sorry, just confirm you want me to track southwest and the aircraft's departing southwest?”

The controller replied:

“Affirm I will advise you on when you can make your turn”, which was acknowledged by the pilot.

At 1435:15 the pilot of the PA28 called on frequency and was immediately passed the following Traffic Information:

“Traffic extending er down, correction, extending upwind from Runway 22 is a Twin Star will turn in behind you”.

The PA28 pilot replied: *“Roger – we’re looking”.*

At 1435:35 the pilot of the DA42(B) reported late downwind and was instructed to report final. The OJTI then took the frequency and instructed the PA28 pilot to:

“Make your downwind leg behind the Twin Star now on climb-out runway 27, if you turn right to the east slightly that should put you behind.”

The PA28 pilot replied: *“position behind the DA42”.*

Apparently airborne, but yet to appear on the area radar replay was the DA42(A), the pilot of which was advised by the OJTI at 1436:08:

“Previously mentioned Cherokee is believed to be in your 10 o'clock 1 mile, will position behind you”.

The DA42(A) pilot reported that the traffic was not in sight.

At 1436:18 the pilot of the PA28 asked for their height restriction to be cancelled which was approved by the trainee controller (Figure 2 – 1436:24).

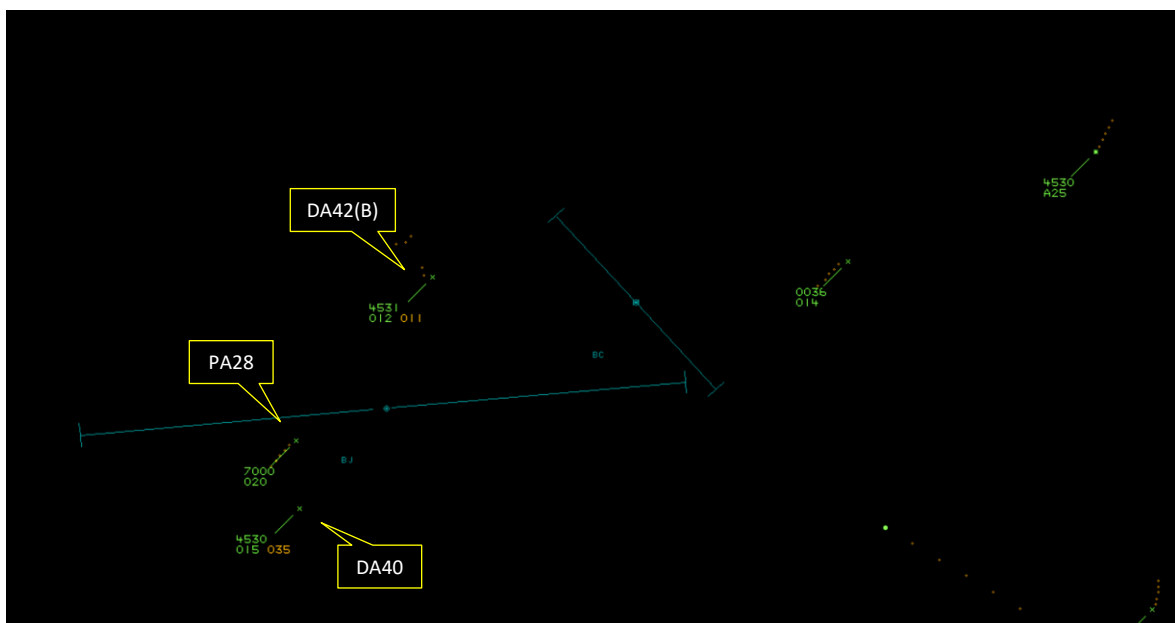


Figure 2 – 1436:24

All aircraft were visible on the area radar replay at 1436:32 (Figure 3)

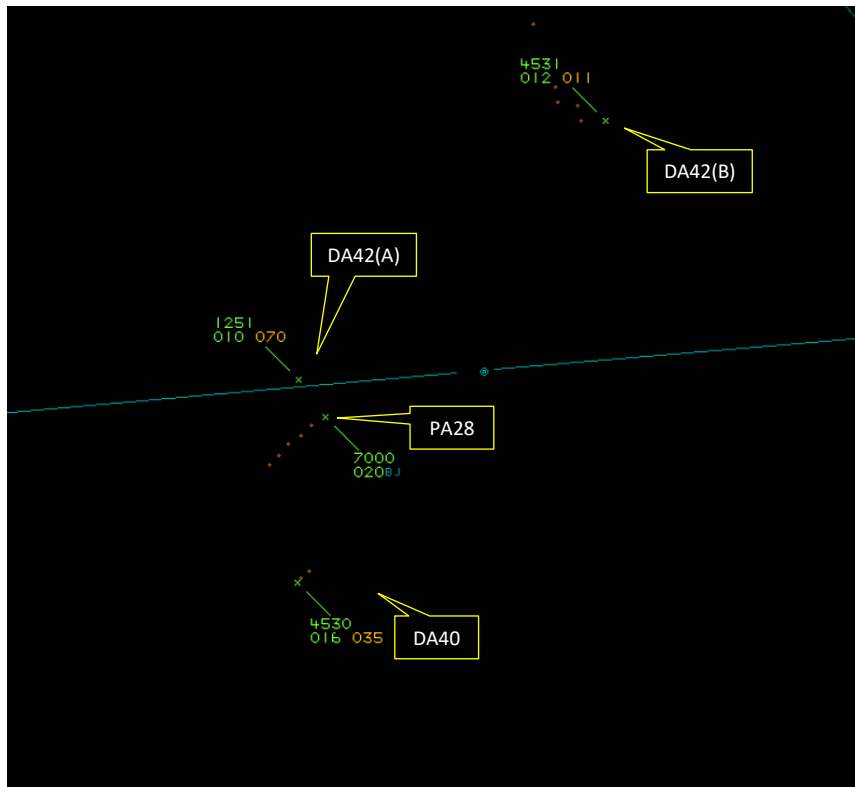


Figure 3 – 1436:32

The PA28 pilot reported downwind for RW22 at 1436:50 and was instructed to report final, number 2 to the DA42(B) on a 2-mile final.

At 1437:07 the Tower controller requested a level check from the DA42(A) pilot which was reported as 1500ft (Figure 4).

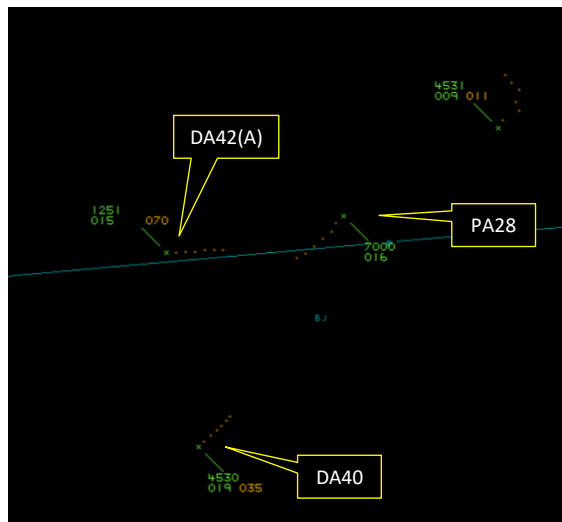


Figure 4 – 1437:07

The controller then passed the following to the DA40 pilot:

“Previously mentioned Twin Star has now turned left tracking southwest passing one thousand five hundred feet, you can turn north er right er when er when ready” which was acknowledged by the pilot. The controller then, at 1437:26, advised the DA42(A) pilot:

“Traffic southwest of the field er 4 miles turning right to the north is a DA40”, the pilot reported that the traffic was not in sight (Figure 5).

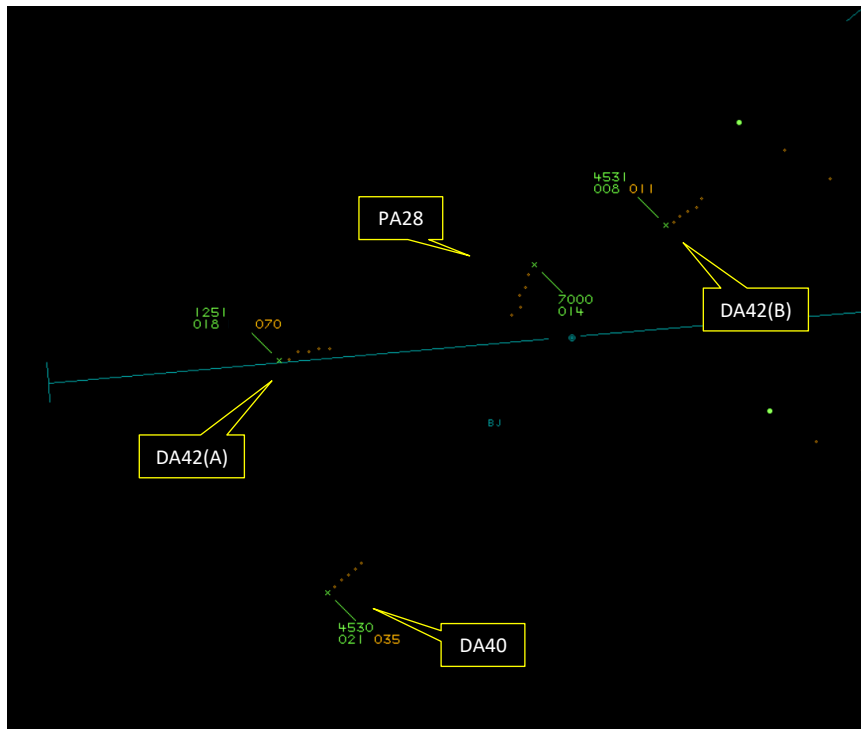


Figure 5 – 1437:26

The controller dealt with the DA42(B) in the circuit, then started a transmission to the DA42(A) pilot but stopping after the callsign. The controller dealt with another aircraft on the ground and then at 1438:06 asked the DA40 pilot:

“Are you visual with previously mentioned Twin Star?” (Figure 6)

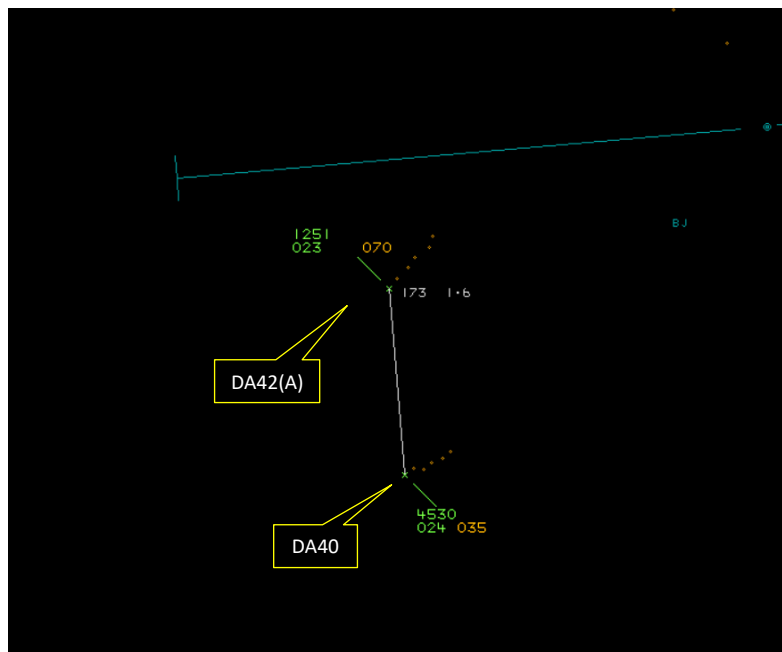


Figure 6 – 1438:06

The DA40 pilot replied: “The one that departed southwest after we departed southwest? Affirm (callsign), so we’re going to route behind him”.

The controller acknowledged this and then transferred them to the Approach frequency at 1438:15. At 1438:25 the controller advised the DA42(A) pilot:

“Previously mentioned DA40 is visual with you now” and transferred them to the Approach frequency (Figure 7).

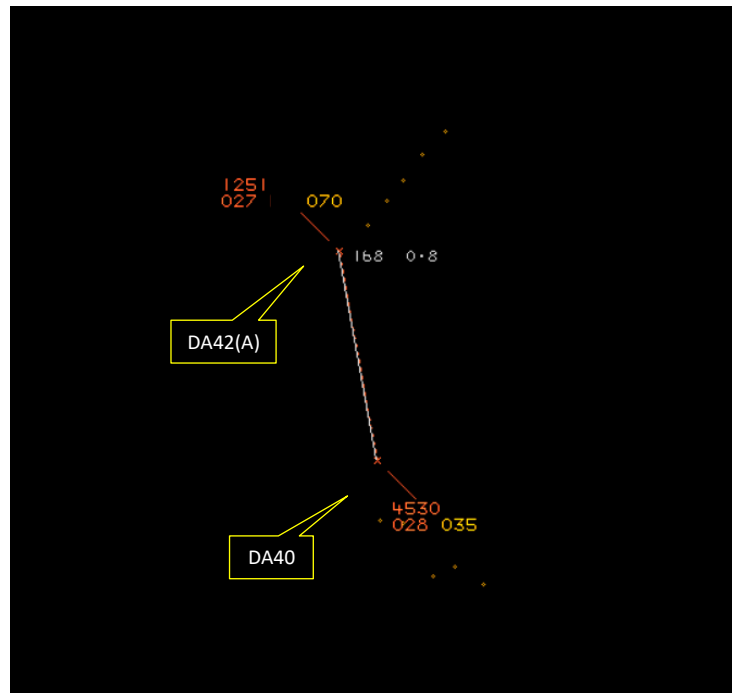


Figure 7 – 1438:25

The DA42(A) pilot acknowledged this and confirmed that they had the traffic in sight before reading back the frequency change. CPA occurred at 1438:35 (Figure 8).

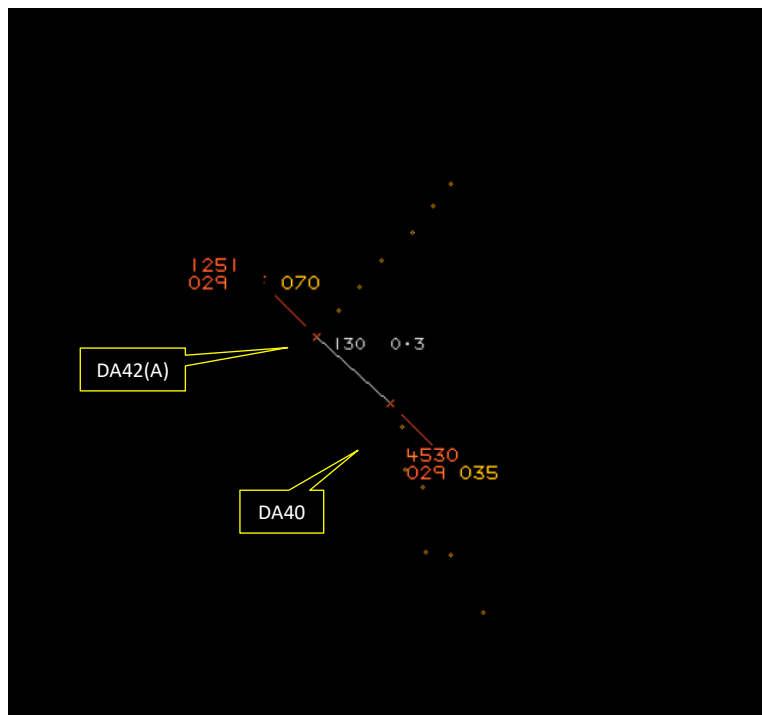


Figure 8 – 1438:35 – CPA

Analysis

ATSI reviewed reports from both pilots involved in the Airprox, the report from the trainee Tower controller and a unit investigation report. No report was received from the OJTI. Gloucestershire Airport has no operational surveillance radar. They were using a primary-only ATM, but no recordings were being made, and so area radar was used for analysis and to provide the snapshots

for this report. ATSI was also provided with the recorded RTF from both the Gloucestershire Tower and Approach frequencies.

According to CAP493, Manual of Air Traffic Services, an Aerodrome Controller is responsible for, amongst other things, issuing:

... information and instructions to aircraft under its control to achieve a safe, orderly and expeditious flow of air traffic with the objective of:

(1) Preventing collisions between:

(a) aircraft flying in, and in the vicinity of, the ATZ;

(b) aircraft taking-off and landing;

(c) aircraft and vehicles, obstructions and other aircraft on the manoeuvring area.

Note: Aerodrome Control is not solely responsible for the prevention of collisions. Pilots and vehicle drivers must also fulfil their own responsibilities in accordance with RoA Regulations.

With respect to transfer of control:

Unless specified otherwise in the MATS Part 2, the responsibility for control of a departing aircraft shall be transferred from Aerodrome Control to Approach Control:

(1) in VMC: prior to the aircraft leaving the vicinity of the aerodrome, or prior to the aircraft entering IMC; and

(2) in IMC: immediately after the aircraft is airborne.

The Gloucestershire MATS Pt 2 covers transfer of control, which requires close cooperation between Tower and Approach controllers, but is focussed mainly on inbound traffic.

With respect to the provision of separation standards, there is no requirement to separate IFR & VFR aircraft in Class G airspace, and:

In Class G airspace, separation between aircraft is ultimately the responsibility of the pilot; however, in providing a Deconfliction Service or a Procedural Service, controllers will provide information and advice aimed at achieving defined deconfliction minima.

With respect to the provision of a Procedural Service in Class G, CAP774 UK Flight Information Services states:

A Procedural Service shall only be provided to flights under IFR, irrespective of meteorological conditions.

With respect to deconfliction under a Procedural Service:

A controller shall provide deconfliction instructions by allocating levels, radials, tracks, routes and time restrictions, or use pilot position reports, aimed at achieving a planned deconfliction minima from other aircraft to which the controller is providing a Procedural Service in class G airspace.

There was no requirement for either the Tower or the Approach controller to separate or provide deconfliction minima between the DA40 and the DA42.

Reciprocal Traffic Information was passed, with the DA42 pilot reporting visual with the DA40 climbing out from RW22. After the DA40 pilot had been cleared to make their turn to the north, they confirmed when questioned by the Tower controller that they were visual with the DA42 and intended to pass behind. This was confirmed in a subsequent conversation with the DA40 pilot during the unit investigation. The two aircraft were at the same level and 1.6NM apart at that time.

When the Tower controller advised the DA42 pilot that the DA40 pilot was visual with them, the pilot confirmed being visual with the DA40. Again, this was confirmed during a subsequent conversation with the instructor on board the DA42 during the unit investigation. The instructor confirmed that it

had been the student who had reported not being visual with the DA40, and that they, the instructor, had been visual with the DA40 throughout the period from take-off until after the reported Airprox. The aircraft were 100ft vertically and 0.8NM laterally apart at the time.

The traffic situation at the time was complex with two runways in use, (RW22 being the designated runway), and both IFR training and VFR circuits. The Tower controller's initial focus was on the integration of the PA28 VFR arrival for RW22 with the right-hand circuit active, the DA42 waiting to depart RW27 and the DA40 climbing out from RW22 for the north. Traffic Information was being passed, although when the controller advised the PA28 pilot that there was traffic, (the DA40), extending upwind RW22 they incorrectly referred to that aircraft as a "Twin Star" not a Diamond Star. They also stated that the DA40 would turn in behind them (the PA28), although ultimately no such instruction was ever passed to the pilot of the DA40, nor was the DA40 pilot ever passed Traffic Information on the opposite direction PA28. The OJTI stepped in at one point to ensure the inbound PA28 would pass behind the departing DA42. Whilst there was also no Traffic Information passed to the pilot of the departing DA42 on the other DA42 crossing through the RW27 climbout in the circuit for RW22, this was not a factor in the Airprox.

In examining how the situation might have been handled differently, the local noise abatement procedures at Gloucestershire have to be taken into account, which specify that the standard circuit for RW22 is right-hand. There is an option to go left-hand after having passed Chosen Hill (1.2NM) if needed, and this might have been an option to expedite the turn to the north for the DA40 after their touch-and-go on RW22. The next arrival on RW27, the EC135, was still over 12NM away and could not be considered to be a factor. However, the potential confliction between the DA40 and RW22 final approach may have dissuaded the Tower controller from taking the DA40 left-hand. The unit investigation stated that both the controller and the OJTI believed that to utilise the left turn for the DA40 would have increased the complexity of the situation (Figure 8).



Figure 8 – Gloucestershire runway configuration

The departing DA42 might have been given a clearance to route straight ahead after departure to allow the DA40 to turn to the north and pass astern. This was not discussed in the unit investigation but, following a request by ATSI, the unit manager confirmed that the departure clearance issued to the DA42(A) was to provide procedural departure separation against another IFR departure. The unit did not specify which other aircraft this was. The training EC135 which was conducting an RNP to RW27, was 12NM ENE but had not reached the IAF NIRMO. It was not known what flight rules the EC135 pilot was operating under, nor the service being provided, as no service had been requested by the pilot on first call to Approach, nor specified by the Approach controller.

The Tower controller stated in their report that they believed that having updated the Traffic Information, they had left the decision as to when it was safe for the DA40 pilot to turn to the north, to the pilot.

Conclusion

The Airprox occurred outside the ATZ, over 4.5NM to the south of the airfield.

In a complex environment with crossing runways and (potentially) conflicting traffic, reciprocal Traffic Information was passed to both the DA42 and DA40 pilots by the Tower controller.

The final statement in the unit investigation report concluded that “...*the initial plan by ATC may have ultimately led to the resulting Airprox*”. It is unfair to suggest that the ATC plan was the root cause but may have been a contributing factor in this occurrence.

The pilots of both aircraft were visual with each other and were ultimately responsible for separation.

UKAB Secretariat

The DA40 and DA42 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard.² If the incident geometry is considered as converging then the DA40 pilot was required to give way to the DA42.³

Summary

An Airprox was reported when a DA40 and a DA42 flew into proximity 4.5NM southwest of Gloucestershire airport at 1439Z on Monday 12th August 2024. The DA40 pilot was operating under VFR in VMC and the DA42 pilot was operating under IFR in VMC, both pilots had been receiving an ACS from Gloster Tower, had been transferred to Gloster Approach frequency, but had not yet established a service with them.

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 first looked at the actions of the controllers. It was noted that the Tower controller had been under training and that there had not been a report provided to the UKAB from the OJTI; members were disappointed by this, but decided that, for the purposes of assessing the Airprox, they had to assume that the OJTI had been content with all of the decisions and calls made by the trainee, given that the OJTI hadn't interjected on the RT for this Airprox (although they had at other times). Controller members noted that at the time of the Airprox it had been a busy and complex visual circuit, with multiple aircraft types in the visual circuit, joining and departing, together with a mix of VFR and IFR flights. The controller had not been required to provide any specified separation between the IFR and VFR traffic, only to deconflict. The controllers had been faced with a scenario where a pilot flying VFR in the circuit had wanted to depart from RW22 on a heading that directly conflicted with an IFR flight departing on RW27. Members noted that, with hindsight, there had been other options that the controller could have taken at the time in order to deconflict the two aircraft, but were generally in agreement that the one chosen, to keep the DA40 on a southwest heading, would have worked better had the controller also introduced some vertical separation. Members debated at length whether the phraseology used to advise the DA40 pilot that they could resume their own navigation had been an instruction or not. Some members felt that when the controller had said “*Continue to extend down, correction, upwind until*

² (UK) SERA.3205 Proximity.

³ (UK) SERA.3210 Right-of-way (c)(2) Converging.

instructed” with details of the departing DA42, and this had been questioned by the DA40 pilot, the controller had again reiterated that they would advise when the DA40 pilot could turn, so that at 1437:07 when the controller said “*you can turn north er right er when er when ready*” without checking that the DA40 pilot had been visual, this could have been considered to have been an instruction. Other members countered that the DA40 pilot had been in Class G airspace and had been given Traffic Information and so the controller had probably assumed that the pilot would not have turned into the DA42. In the end, members agreed that the instructions to the DA40 pilot could have had more clarity and, at the very least, the controller should have asked the DA40 pilot whether they had been visual before giving permission for them to turn onto north (CF2).

In the course of discussing the actions of the Tower controller, controller members noted the complexity of the circuit and discussed the options available to the controller. Members noted that most units that operate with dual runways have set procedures specifying the actions to be taken in any particular set of circumstances, particularly when integrating IFR and VFR traffic. Such procedures assist controllers during times of high workload as they take away any doubt as to the correct action to be taken. Without such procedures at Gloucester (CF1), members thought that too much pressure was being put on controllers to allow airfield operators to operate as they wished, whilst expecting the controllers to make it work. Members therefore resolved to make a recommendation that:

Gloucestershire Airport reviews its procedures with regard to integration of IFR and VFR traffic during multiple runway operations.

Turning to the actions of the DA40 pilot, members noted that they had been operating VFR, and had been given an instruction by ATC that they had not agreed with, questioned it, but on receiving the same instruction had, correctly, followed the instruction. Members noted that the pilot had reported in their narrative that they had been visual with the DA42, and had received information from their TAS (CF5). However, once ATC had advised the pilot that they could turn onto north, they had turned directly on track, and towards the DA42 (CF4). Members were sympathetic that this had been an examination and therefore routeing southwest, when the pilot had wanted to go north for some general handling, had been inconvenient, but still members thought that a better option would have been for the DA40 pilot to have allowed a greater lateral separation when turning to route behind the DA42 (CF3, CF6).

The DA42 pilot had been departing IFR and had followed ATC instructions, they had been given Traffic Information about the DA40, and other circuit traffic that had been restricted for their departure and had received information on their TAS (CF5). Members noted that the student pilot had told ATC that they had not been visual with the DA40, when in fact the Instructor, who would have been operating as the lookout with the student probably ‘under the hood’, had been visual with it. Members thought that, in such a busy ATC environment, this had not been helpful, as reporting visual may have given the controller other options. Once cleared on track, as an IFR departure, the pilot had probably been expecting a level of protection from ATC, but still members noted that the pilot’s comments that they had been on the right and therefore had right of way, whilst correct, had not precluded the pilot from making a heading change to break the confliction, particularly given that they had reported being concerned by the proximity of the DA40 (CF7).

When determining the risk, the Board considered the radar replay together with the reports from the pilots and controllers. They quickly agreed that because both pilots were visual with the other aircraft there had been no risk of collision. Some members mooted that in Class G airspace, with both pilots being visual with each other and a separation of 0.3NM, this could have been considered to be normal operations (and therefore Risk Category E). But others countered that safety had been degraded and in the end the latter view prevailed; Risk Category C.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2024203			
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification
	Ground Elements			

• Regulations, Processes, Procedures and Compliance				
1	Organisational	• Aeronautical Information Services	An event involving the provision of Aeronautical Information	The Ground entity's regulations or procedures were inadequate
• Situational Awareness and Action				
2	Human Factors	• Traffic Management Information Provision	An event involving traffic management information provision	The ANS instructions contributed to the Airprox
Flight Elements				
• Tactical Planning and Execution				
3	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				
4	Human Factors	• Lack of Action	Events involving flight crew not taking any action at all when they should have done so	Pilot flew close enough to cause concern despite Situational Awareness
• Electronic Warning System Operation and Compliance				
5	Contextual	• Other warning system operation	An event involving a genuine warning from an airborne system other than TCAS.	
• See and Avoid				
6	Human Factors	• Lack of Individual Risk Perception	Events involving flight crew not fully appreciating the risk of a particular course of action	Pilot flew close enough to cause concern
7	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.

Recommendation: Gloucestershire Airport reviews its procedures with regard to integration of IFR and VFR traffic during multiple runway operations.

Safety Barrier Assessment⁴

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

Ground Elements:

Regulations, Processes, Procedures and Compliance were assessed as **partially effective** because Gloucestershire Airport does not have any procedures to assist the controllers with integrating IFR and VFR traffic when using mixed runways.

Situational Awareness of the Confliction and Action were assessed as **partially effective** because the controller had not checked that the DA40 pilot had been visual with the DA42 before issuing permission to turn onto north.

Flight Elements:

Tactical Planning and Execution was assessed as **partially effective** because the DA40 pilot positioned to go behind the DA42 but could have given the other aircraft more lateral separation.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **partially effective** because the DA40 pilot turned towards the DA42 despite having situational awareness on its position.

⁴ The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).

Airprox Barrier Assessment: 2024203		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 Conflicition & 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							
Key:			<u>Full</u>	<u>Partial</u>	<u>None</u>	<u>Not Present/Not Assessable</u>	<u>Not Used</u>	
Provision								
Application								
Effectiveness								