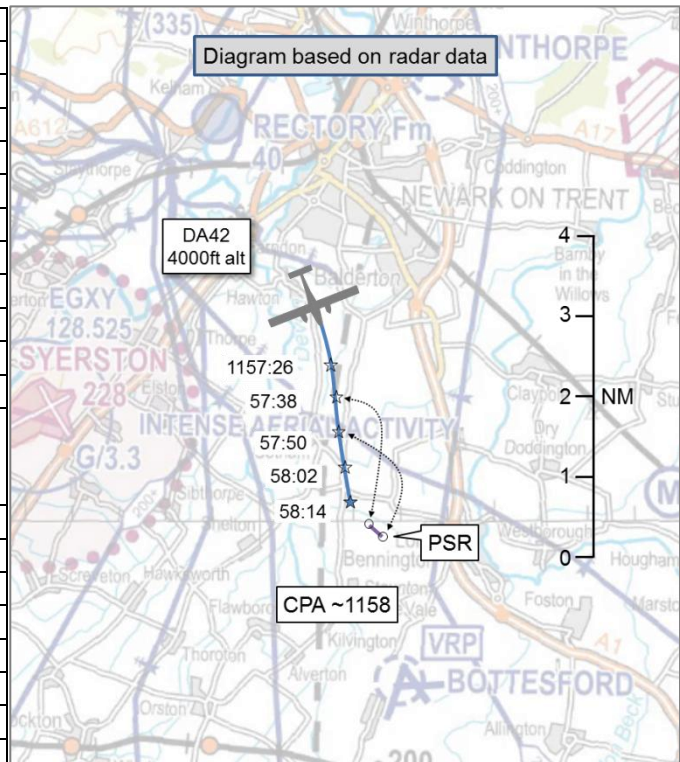


**AIRPROX REPORT No 2015122**

Date: 31 Jul 2015 Time: 1158Z Position: 5300N 00046W Location: 4nm south of Newark

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

Recorded	Aircraft 1	Aircraft 2
Aircraft	DA42	ASW20
Operator	Civ Trg	Civ Pte
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	None	None
Provider	(East Midlands)	N/A
Altitude/FL	4000ft	NK
Transponder	A, C, S	Not fitted
Reported		
Colours	White/yellow	white
Lighting	Taxi, landing, nav, wingtip strobes	NK
Conditions	VMC	VMC
Visibility	>10km	30km
Altitude/FL	4000ft	4000ft
Altimeter	QNH (1019hPa)	NK
Heading	180°	170°
Speed	145kt	50kt
ACAS/TAS	TAS	FLARM
Alert	None	None
Separation		
Reported	200ft V/200m H	30ft V/400ft H
Recorded	NK	



**THE DA42 PILOT** reports having just departed home base on a ferry flight. The flight was used to give a new company pilot some additional experience of operating the aircraft under the supervision of an instructor. A second company pilot sat in the rear of the aircraft. Just after reaching top of climb, the handling pilot changed to East Midlands Approach to obtain a ‘Radar Service’. They had elected to fly to the east of Syerston Airfield where intense gliding was common and were heading 180° following a deviation on a south easterly heading. The handling pilot was using a CAA VFR chart for navigation, backed up by the aircraft avionics map display. At this stage he was dividing tasks between ATC liaison, navigating to avoid Syerston, and lookout. The handling pilot sighted, and called, a glider ahead. Both the pilot in the rear of the aircraft and the instructor pilot looked out in the direction the handling pilot had called but neither of them initially saw the other aircraft. However, after a brief moment, the glider passed down their left-hand side at a distance of approximately 200m, slightly below them. The Instructor pilot stated that, from his own perspective in the right-hand seat, the glider appeared from behind the instrument panel, which created a significant blind-spot, and he was able to see it only briefly before it disappeared behind the engine/wing. The pilot in the rear of the aircraft reported seeing the glider similarly late. The handling pilot suggested after the incident that, despite the late spot and the aircraft passing as close as it did, he was confident that no risk of collision existed, and avoiding action was not taken. The DA42 was identified by East Midlands Radar shortly afterwards and they received a Traffic Service for the remainder of the flight.

He assessed the risk of collision as ‘High’.

**THE ASW20 PILOT** reports turning left in a thermal when he saw a white low-wing twin-engine aircraft pass by. He was advised afterwards that the other pilot had filed an Airprox.

He assessed the risk of collision as 'Low'.

**THE EAST MIDLANDS CONTROLLER** was not aware an Airprox had occurred and did not submit a report.

### Factual Background

The weather at East Midlands was recorded as follows:

METAR EGNX 311150Z 22009KT 190V250 9999 SCT046 18/06 Q1018

### Analysis and Investigation

#### CAA ATSI

The DA42 pilot made an initial call to East Midlands Radar at 1155:30 requesting a Traffic Service. The East Midlands controller had a medium traffic loading and the allocation of a squawk was not made until 1156:00. However the displayed squawk did not change until the East Midlands controller asked the DA42 pilot to check his squawk at 1157:32, after which the squawk changed from 7000 to 4551. The aircraft was formally identified and given a Traffic Service at 1158:57, reduced due to multiple contacts to the east.

At the time reported by the DA42 pilot in his Airprox report, the DA42 had a primary radar contact in its vicinity on the area radar recording (indicated by leader line on Figure 1 below), but the primary contact disappeared within 10sec of having first appeared. East Midlands ATC also reported in their review of the incident, that a primary contact was visible in close proximity to the DA42 on the controller's radar display.

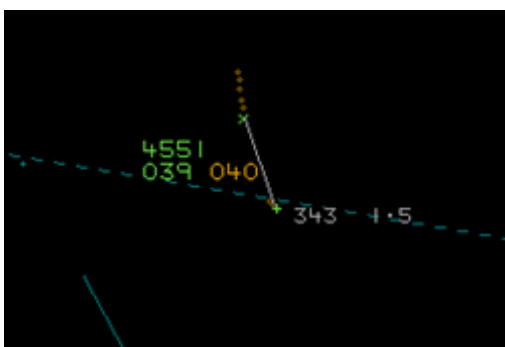


Figure 1: 1157:48 aircraft changes squawk – (primary contact visible 1.5nm SSE of DA42)

At the time the DA42 was formally identified and a Traffic Service confirmed the controller immediately passed Traffic Information on another contact in the vicinity (Figure 2). This contact was transponding 7000 with Mode C altitude information. There were no other contacts visible in the immediate vicinity of the DA42 on the area radar recording.

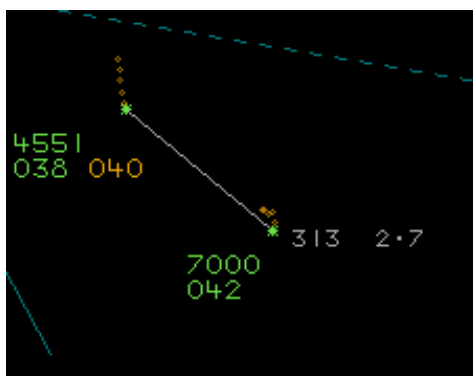


Figure 2: 1158:58 DA42 identified and passed Traffic Information on unknown traffic 2.7nm SE

At the time reported by the pilot in his Airprox report, the aircraft had neither been formally identified, nor placed under an Air Traffic Service by the East Midlands controller. The DA42 pilot did not report an Airprox on RT.

### **UKAB Secretariat**

The DA42 and ASW20 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>. It was not possible to determine the geometry of the encounter.

### **Comments**

#### **BGA**

The BGA commends the pilot of the DA42 for his lookout and awareness of possible gliding activities. A reminder that it is 'see and avoid' in Class G.

### **Summary**

An Airprox was reported when a DA42 and an ASW20 flew into proximity at 1158 on Friday 31<sup>st</sup> July 2015. Both pilots were operating under VFR in VMC and neither were in receipt of an Air Traffic Service.

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

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

Members first discussed the markedly different assessment of risk of collision from each pilot. It was not possible to ascertain the actual separation due to lack of track information for the glider, but members suggested that the difference in perception may have been due to factors such as the DA42 pilot's much higher speed and the experienced glider pilots' likely exposure to frequent flight in close proximity to other gliders. The Board noted that the DA42 pilot had seen the glider before the other 2 crew members, at a late stage, had assessed that the aircraft were not going to collide, and reported passing about 200m from it. A glider member stated that it was common to pass other traffic under such conditions in Class G airspace, and that the glider pilot had assessed that the 2 aircraft were not going to collide and was apparently unconcerned. He also noted that the glider pilot would likely have heard the DA42 before he saw it, and would have started to build some expectation that an aircraft was about to pass close by. Members agreed that the glider pilot had also seen the DA42 at a late stage, and felt that the Airprox had been caused by a late sighting by both pilots. Members noted that both aircraft were fitted with a TAS but unfortunately that they were not compatible and therefore that no alert was generated. Some members felt that safety margins had been much reduced below the norm, but the majority felt that it was more likely that this was not the case, albeit by a close margin, and that in the end there had been no risk of actual collision.

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

Cause: A late sighting by both pilots.

Degree of Risk: C.

---

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