AIRPROX REPORT No 2024096

Date: 17 May 2024 Time: 1123Z Position: 5151N 00035W Location: 2NM west of Dunstable Downs

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2	Diagram based on radar data
Aircraft	P68	DR400	and pilot reports
Operator	Civ Comm	Civ FW	
Airspace	Luton CTR	Luton CTR	P68 * 1122:18
Class	D	D	1800ft
Rules	VFR	VFR	110 005
Service	Radar Control	None	1122:34
Provider	Luton Radar	N/A	DUNGTON DI EDOMANO
Altitude/FL	1900ft	1600ft	DONOTADLEEDOWNOD
Transponder	A, C, S	None	1800ft
Reported			
Colours	White and blue		
Lighting	Navigation, anti-		
	collision		1525tt DR400
Conditions	VMC		
Visibility	>10km		CPA 1123:06
Altitude/FL	2000ft	Not Reported	~300ft V/<0.1NM H
Altimeter	QNH (1010hPa)		
Heading	160°		EEN S
Speed	140kt		
ACAS/TAS	Not fitted		
Alert	N/A		017 M
Separation at CPA			
Reported	100ft V/0.2NM H	NR]
Recorded	~300ft V/<0.1NM H		

THE P68 PILOT reports that they had been transiting Luton controlled airspace not above 2000ft, instructed to remain west of Dunstable Downs glider site whilst transiting north-to-south. They had been aware of glider activity in the area and had already spotted a few in the moments prior. They were approximately 2 miles northwest of Dunstable Downs when ATC provided Traffic Information "slightly left of your 12 o'clock, 1/2 a mile, 200ft below" [they recall]. They report that they initially couldn't see the other aircraft, as they were obscured by the nose and hard to see. A moment later they spotted the traffic which was a glider under tow from another aircraft with a cable, which they believe must have departed from Dunstable RW22, pretty much directly into their track. By the time the P68 pilot had seen them and judged they were climbing into [the P68's path], they took avoiding action by adding power and pitching up, as they didn't have suitable clearance to initiate a turn. The other aircraft didn't seem to notice that they were there and continued on its track whilst climbing into [the P68's] level. The P68 pilot considered that "a late warning of traffic - 1/2 a mile - is very close and by the time the P68 pilot had visually acquired the traffic they had already been in a collision risk. The controller had probably only just noticed it on radar [they opined] as it had only just departed Dunstable". The P68 pilot notes that ATC had been very accommodating and gave good Traffic Information [...], but having gliders departing without warning inside CAS isn't ideal. The P68 pilot [thought that], in hindsight, the transit they were offered only saved minimal time as opposed to just having routed around the zone entirely, so maybe a better decision would have been to just accept the zone is busy and remain outside CAS.

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

THE DR400 PILOT reports that they had been flying [the DR400] whilst towing a glider in line with [Dunstable's] standard noise abatement procedures and typical tow-out routes. [...]. The P68 in question had been spotted heading southbound whilst the DR400 pilot had been heading northbound having gone around Eddlesborough. At the time of the reported Airprox, the DR400 pilot had been

heading north towards a group of gliders thermalling, with the intention of connecting the glider pilot on tow with a thermal. To avoid any conflict, the DR400 pilot had initiated a right turn. The pilot of the P68 had initiated a left turn, though they suspect in part to avoid the glider gaggle. From their recollection, the closest point to them had been several hundred metres away and they had not felt uncomfortable with the situation. The DR400 pilot added that "as the pilot of [the DR400] they do not really see the need or wish to submit an Airprox report. In summary as far as they were concerned two aircraft in class G airspace flying VFR saw each other and took appropriate avoiding action. There had been no risk of collision."

The pilot assessed the risk of collision as 'None'.

THE LUTON RADAR CONTROLLER reports that the pilot of a P68 had called on Luton INT frequency to request a Luton Zone transit which had been issued VFR not above 2000ft west of Dunstable gliding site. Generic Dunstable and glider-specific Traffic Information had been passed to the pilot. The controller noted that they were unaware of an Airprox occurring at the time.

Factual Background

The weather at Luton was recorded as follows:

METAR EGGW 171120Z AUTO VRB03KT 9999 NCD 19/10 Q1010=

Analysis and Investigation

NATS Safety Investigation

A P68 pilot, operating VFR, had been issued a clearance to transit the Luton CTR. The Luton Intermediate Director passed Traffic Information on a pop-up primary contact within the Dunstable Downs Gliding Area, which had been in close proximity to the aircraft. The pilot initially stated that they had not been visual before the controller informed them that they had then been clear. The pilot of the P68 subsequently responded that they had taken an avoidance manoeuvre.

The pilot of the P68 had called onto frequency with the Luton Intermediate Director (GW INT) and requested a Traffic Service and zone transit on track to [destination airfield]. The GW INT had issued a squawk of 4670, identified the aircraft, and issued the pilot with a Basic Service due to controller workload. Dunstable Downs Gliding Areas 1 and 5 had been activated, as requested, for RW25 operations at Luton. The LoA between NATS and the London Gliding Club established procedures for the use of the areas by gliders operating VFR without being in communication with the GW INT controller. The GW INT had informed the pilot that a zone transit via the overhead would be subject to a delay and asked the pilot whether they would be able to route to the west of Dunstable Downs. The pilot had responded that transit via the west of Dunstable Downs "was absolutely fine". The GW INT had then issued the clearance at 1112:20 - "not above altitude two thousand feet, VFR, west of Dunstable Downs, caution they are notified as active, keep a good lookout".

A controller handover had subsequently taken place. The next transmission to the pilot of the P68 had occurred at 1121:50 when the incoming controller had informed the pilot of the P68 "you'll be entering controlled airspace very shortly for Radar Control" before passing Traffic Information on a primary contact, with which the pilot reported visual. The P68 had entered the Luton CTR at 1122:22. A primary-only contact had appeared on radar at 1122:38 with the GW INT passing Traffic Information to the pilot of the P68 of "further possible glider traffic there, just slightly left of your twelve o'clock, range about half a mile", at 1122:44. The pilot reported that they had not been visual with the traffic. The Closest Point of Approach (CPA) measurable on radar between the P68 and the primary contact occurred shortly after the conclusion of that RT exchange.

The primary return had not updated on the following radar sweep, indicating that tracking had been lost, and the return disappeared from radar on the update subsequent to that. Another unrelated pilot had then begun a transmission which the GW INT had responded to. After the conclusion of

this unrelated RT exchange, the GW INT informed the pilot of the P68 that they had then been clear of the previously mentioned traffic, the pilot responded that they "had to get out of the way [unintelligible]". There had been no mention of an Airprox whilst the pilot had been on frequency with the GW INT. Safety Investigations was subsequently informed by UKAB that the pilot of the P68 had filed an Airprox report.

Safety Investigations note: The Traffic Information provided to the pilot in relation to this traffic is detailed above, passed at 1122:34, and had not included any relative altitude information. Mode C data indicated that the P68 pilot had initiated a climb as the aircraft had reached CPA, reaching an altitude of 2200ft. The other traffic was identified by UKAB as a DR400 aircraft and operated as a tug. At the time of writing this report, no Airprox report had been received from the pilot of the DR400.

The LTC MATS Part 2, LTN 10.5 detailed LTC Luton procedures regarding gliding activity within the Dunstable Downs areas and the Chiltern Ridge Soaring Area. 10.5.9 detailed:

'If a VFR/SVFR Luton arrival, departure or transit is likely to route through any activated airspace, TC Luton shall notify the pilot of the intense gliding activity and if necessary, shall advise the pilot to avoid the immediate vicinity of Dunstable Downs. TC Luton shall pass generic Traffic Information based on reported or observed activity.'

The UK AIP Part 3 - Aerodromes, EGGW AD 2.22-8 detailed:

'Intense gliding, hang-gliding and paragliding activity takes place with winch cables up to 2500ft QNH during daylight hours at Dunstable Downs' and [adds that] 'Pilots of aircraft operating under VFR, or on a Special VFR clearance are advised to avoid these areas if at all possible. In addition, pilots operating on a Special VFR clearance are advised that due to the nature of these activities they cannot be given separation from gliders, aircraft towing gliders, hang-gliders, paragliders or microlights within these designated areas. Traffic Information will NOT be passed by ATC.'

The GW INT had complied with the MATS Pt. 2 requirements regarding the VFR transit of the P68, by informing the pilot of the gliding activity taking place. The GW INT had also passed specific Traffic Information on two contacts that had been shown on radar, in addition to the requirements stipulated in MATS Pt.2 and the UK AIP.

The LoA between NATS and London Gliding Club stipulated in section A.3.1.2:

With the exception of gliders, it is a legal requirement for any transponder equipped aircraft operating under the terms of this agreement within the area of operation shall utilise the transponder to the maximum serviceable extent, selecting SSR code 7010 with altitude information selected.

This stipulation had been in accordance with the Standardised European Rules of the Air (SERA) 13001 Operation of an SSR transponder which specified:

'When an aircraft carries a serviceable SSR transponder, the pilot shall operate the transponder at all times during flight, regardless of whether the aircraft is within or outside airspace where SSR is used for ATS purposes.'

UKAB Secretariat



Figures 1 and 2: CPA 1123:06 ~300ft V/<0.1NM H

Both the P68 and DR400 were tracked via radar, however, the DR400 appeared as a primary contact only with its altitude derived from a GPS source to construct the CPA data.

The P68 and DR400 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 P68 pilot was required to give way to the DR400.²

Comments

AOPA

Whilst transiting controlled airspace and in proximity to a very busy gliding site, being restricted to 2000ft reduces the vertical avoidance option for collision avoidance; it is encouraged to fit appropriate electronic conspicuity equipment to assist in identification of other aircraft.

BGA

The BGA encourages all pilots to participate in the Airprox process.

Dunstable Downs airfield is a very busy gliding site, active 7 days per week, year-round. London Gliding Club has been based there since 1930, coexisting amicably with nearby Luton Airport since it opened in 1938. The current framework for this cooperation is a Letter of Agreement with NATS (which operates the Luton CTR and CTA) that authorises LGC gliders, tugs and tug/glider combinations to fly within designated sections of the Luton Class D airspace without establishing radio contact with NATS' controllers. These LoA arrangements are summarised in Luton's AIP entry (see AIP EGGW AD 2.22-8 "Gliding, Hang-gliding, Paragliding and Microlight Activity - Luton CTR/CTA" and AD 2-EGGW-4-1).

When Luton is using RW25, as on this day, gliders, tugs and tug/glider combinations operating under the LoA fly in Dunstable Gliding Areas 1 and 5 (as shown in figure 3) at up to 3500ft AMSL without directly contacting NATS' controllers.

As the Board has previously noted, pilots operating in Class D airspace under VFR are responsible for their own separation from other aircraft (see GM1 SERA.8015(a)). While such VFR flights do in general receive Traffic Information in respect of all other flights and traffic avoidance advice on request (SERA.6001(a)(4)), AIP EGGW AD 2.22-8 notes that "Intense gliding, hang-gliding and

¹ (UK) SERA.3205 Proximity.

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

paragliding activity takes place" within the Dunstable Gliding Areas, where "Traffic Information will NOT be passed by ATC", and that "Pilots of aircraft operating under VFR, or on a Special VFR clearance are advised to avoid these areas if at all possible."



Figure 3: Dunstable Gliding Areas 1 and 5 as described in the Letter of Agreement between Luton and Dunstable.

Summary

An Airprox was reported when a P68 and a DR400 flew into proximity 2NM west of Dunstable Downs at 1123Z on Friday 17th May 2024. Both pilots were operating under VFR in VMC, the P68 pilot in receipt of a Radar Control Service from Luton and the DR400 pilot not in receipt of an Air Traffic Service.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings, GPS track data, a report from the air traffic controller involved and a report from the appropriate operating authority. 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 considered the actions of the P68 pilot. Members noted that the pilot had established positive contact with Luton Radar and had been cleared for a VFR transit through the Luton CTR, recognising that they had been instructed to remain below 2000ft and to the west of the Dunstable Downs gliding site. Members felt that the nature of the gliding activity and complexity of the airspace in that area suggested that, where possible, it might perhaps have been wiser to have routed a little further west and remain clear of the CTR in entirety to reduce the likelihood of encounters with tug/glider combinations. However, having committed to their preferred route, they noted that they had achieved generic situational awareness through limited Traffic Information (**CF3**), albeit late, and that had enabled them to make late visual contact with the DR400 and glider in their 12 o'clock (**CF4**) and to initiate avoidance action. Members accepted that the Letter of Agreement in place between Luton and the Dunstable Gliding Club is clear in that Traffic Information may not be passed in all cases and it had been fortunate therefore that in this case it had been. The Board expressed disappointment that the P68 pilot had not carried an electronic conspicuity unit which might have enabled greater situational awareness in this situation, and again encouraged all operators to consider the use of such equipment.

Members also noted that an Airprox had not been declared on RT at the time of the incident and they encouraged any pilot involved to report at the time to enable data capture for future investigation.

Turning to the actions of the DR400 pilot, members noted the pilot's reluctance to contribute fully to the Airprox process and wished to encourage all involved in such events to respond positively when approached for reporting to enable maximum learning for all. In reviewing the limited material received from the DR400 pilot, members noted that the aircraft had not displayed an active transponder (**CF1**, **CF2**) and this had led to a missed opportunity for increased situational awareness for both the P68 pilot and the Luton controller. Members stressed that it is important to recall that in accordance with (UK)SERA.13001 a powered aircraft equipped with a serviceable transponder shall operate it at all times during flight [...]. This instruction is repeated in the Luton/Dunstable Gliding Club Letter of Agreement and members wished to reinforce the importance of such instruction.

In reviewing the contribution to this event by the Luton controller, members recognised that they had established positive 2-way communication with the P68 pilot and had stressed the need to maintain a 'good lookout'. Despite a controller handover having taken place, seamless Traffic Information had been maintained for the P68 pilot with reference to a number of primary contacts in the area and specifically the DR400 in their 12 o'clock. Board members felt that little more could have been done by the Luton controller in this case.

Concluding their discussion, members summarised their thoughts. It was agreed that the P68 pilot had been provided with Traffic Information regarding a primary contact, that the P68 pilot had then identified as the DR400 and that it had enabled a late avoidance manoeuvre to increase separation between themselves and the tug/glider combination. Members therefore agreed that safety margins had been reduced below the norm but that avoiding action had averted the risk of collision. As such, the Board assigned Risk Category C to this event.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2024096						
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification			
	Flight Elements						
	Regulations, Processes, Procedures and Compliance						
1	Human Factors	Use of policy/Procedures	Events involving the use of the relevant	Regulations and/or procedures not			
	Tactical Planning and Execution						
2	Human Factors	 Transponder Selection 	An event involving the selection and				
		and Usage	usage of transponders				
	Situational Awareness of the Conflicting Aircraft and Action						
3	Contextual	 Situational Awareness 	Events involving a flight crew's	Pilot had no, late, inaccurate or			
		and Sensory Events	awareness and perception of situations	only generic, Situational Awareness			
	See and Avoid						
4	Human Factors	• Identification/ Recognition	Events involving flight crew not fully				
			identifying or recognising the reality of	Late sighting by one or both pilots			
			a situation				

Degree of Risk:

C.

Safety Barrier Assessment³

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

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

Flight Elements:

Regulations, Processes, Procedures and Compliance were assessed as **partially effective** because the DR400 pilot had not switched on their transponder as required by (UK)SERA.13001(a).

Tactical Planning and Execution was assessed as **partially effective** because the DR400 pilot did not switch their transponder on, thus denying full situational awareness of their presence to the Luton controller.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because the P68 pilot had only generic situational awareness of the presence of the DR400 and the DR400 pilot had no situational awareness of the presence of the P68.

