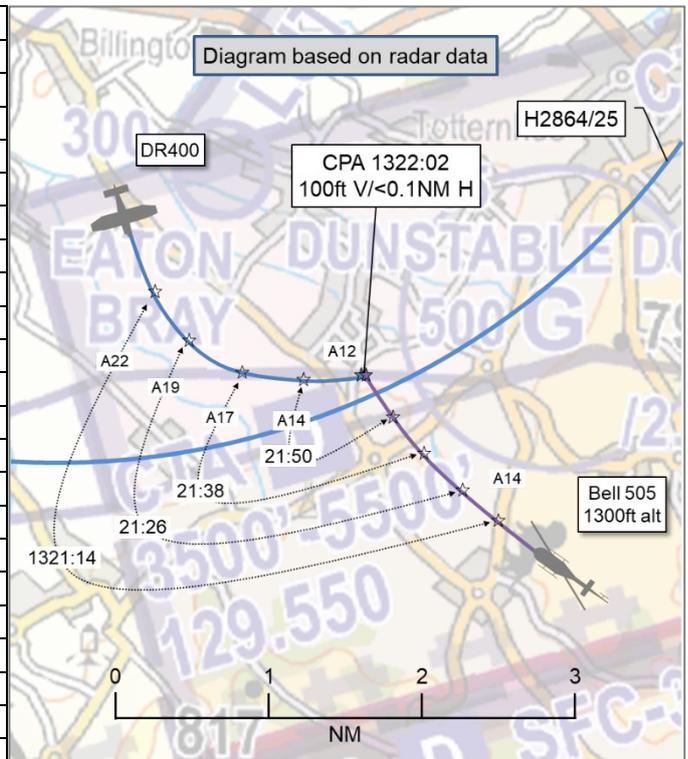


AIRPROX REPORT No 2025188

Date: 02 Aug 2025 Time: 1322Z Position: 5152N 00035W Location: 1NM W of Dunstable Downs

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Robin DR400	Bell 505
Operator	Civ FW	Civ Helo
Airspace	Luton CTR	Luton CTR
Class	D	D
Rules	VFR	VFR
Service	Listening Out	Radar Control ¹
Provider	(Dunstable)	Luton
Altitude/FL	1200ft	1300ft
Transponder	A, C, S	A, C, S
Reported		
Colours	Maroon/white	Red
Lighting	Bcn, strobe, landing	Position lights
Conditions	VMC	VMC
Visibility	>10km	5-10km
Altitude/FL	1400ft	~1500ft
Altimeter	QNH (NK hPa)	QNH (~1021hPa)
Heading	~090°	~330°
Speed	~100kt	115kt
ACAS/TAS	FLARM	TCAS I
Alert	None	TA ²
Separation at CPA		
Reported	>100ft V/>500m H	<100ft V/<0.5NM H
Recorded	100ft V/<0.1NM H	



THE DR400 PILOT reports [an Airprox] occurred during [a] competition 'grid' launch with 5 tugs operating in stream. They were squawking 7010 Mode S (the allocated squawk for London Gliding Club [LGC] towing ops in delegated airspace [sic]) returning from [the] drop zone at 100kt IAS, descending [at about] 800-1000fpm. [They] flew along [the] 'power wires' (a local landmark used to define delegated airspace, visible on OS maps, from Edlesborough to the southwest of Dunstable Downs [Gliding Site] [DD]) [and] extended towards a diagonal base leg to [the] 'northeast run' at DD (this track [is] for minimum track miles and to avoid noise nuisance to local residences). Approaching base leg, descending through approximately 700-1000ft QFE, a helicopter was seen on a converging course (tug heading approximately east, helicopter approximately northwest). It was below the tug and the two courses were obviously going to lead to a tight CPA with a high risk of collision if paths maintained, especially given the trailing rope. Subjective assessment of time to CPA/collision was a few seconds. [An] immediate hard right turn (45-60° bank) [was] carried out to pass behind [the] helicopter. [The] traffic [was] obscured by [the] left wing during [the] turn so [they were] unable to assess separation achieved, but [were] confident throughout [the] manoeuvre that no collision would occur. [The] circuit [was] continued to landing on [the] northeast run [at DD]. [The] subjective assessment [was] that [the] event was significant but the hazard [was] averted by visual lookout. [The] collision risk [would have been] high if [the] tug had not [been] manoeuvred but [was] assessed as 'medium' because VFR 'see and avoid' principles were effective, if a little late. The red colour and strobes [of the helicopter] were surprisingly well-camouflaged against the backdrop of the Chiltern Ridge. The DR400 pilot made the following observations: The helicopter was close to, or inside, the normal northeast run circuit for both gliders and tugs; Estimated height of [the] helicopter [was] 500-700ft agl [and] at [that] height, from [that] direction, the pilot would [have been] unlikely to [have seen DD] until passing the ridge. [They] surmised the [helicopter] pilot did not want to overfly Whipsnade Zoo, which would lead to a closer path to [DD],

¹ Reported as a Basic Service but within the Class D Luton CTR so a Radar Control Service.

² Reported as a TCAS RA but RA is not available with TCAS I fitment and the aircraft was below the minimum height at which a TCAS RA would have been issued.

placing the helicopter in the normal circuit area for tugs and gliders. [The DR400 pilot pointed out that they] did not suggest in any way that Luton ATC, the helicopter [pilot] or [themselves] were not operating in correct procedures. [In their] opinion, if [the] Luton radar ATCO is busy, their focus is bound to be on [Luton Airport] approach/departure traffic. As such, they would rightly give less attention to peripheral VFR/SVFR transit traffic/[DD] traffic. Owing to this, the use of SSR may give false assurance of separation to transit traffic, reducing the imperative to prioritise lookout. During a low-level transit from south of the ridge line, [they] believe it is unlikely to be practical to visually acquire [DD] early enough to assure separation from circuit traffic. [They] suggest that it could be fruitful to explore ways to give better guidance to transit traffic, enabling it to better avoid the [DD] circuit, given the impediments to visually positioning relative to [DD] circuit previously described. To be clear, [they were] not suggesting that there is a basic deficiency in the current operational agreements, just highlighting that there is a potential weakness that south-north transit traffic unfamiliar with the airfield position will find it difficult to avoid the [DD] circuit area due to the nature of terrain south of the airfield, and that additional guidance on tracking may be beneficial.

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

THE BELL 505 PILOT reports an audible warning on TCAS [with a] visual warning on [the] screen. [An] aircraft [was] seen to be heading on a collision course. [They] took avoiding action as did [the] other [pilot], [who] turned away to [the] right. [There was] minimal separation before both pilots took avoiding action. [They were in receipt of] a Basic Service, having received a 'radar service' [sic] in the ATZ from Luton. [They] reported [the] incident to ATC, who stated that [they] hadn't noticed the other aircraft because [they were] on the phone. [The] other [pilot] did not appear to be receiving a service of any sort from Luton.

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

THE LUTON CONTROLLER reports that they were informed of the event but had no recollection of it.

Factual Background

The weather at Luton Airport was recorded as follows:

METAR EGGW 021320Z AUTO 32008KT 9999 SCT048 18/08 Q1019=

A NOTAM was issued for a Dunstable Downs gliding competition, as follows:

H2864/25
 Q) EGTT/QWGLW/IV/M/AW/000/045/5156N00038W006
 A) EGTC B) FROM: 25/07/26 08:00 TO: 25/08/03 17:00
 E) MAJOR GLIDING COMPETITION. INTENSE ACT WI 5NM RADIUS
 515602N 0003807W (DUNSTABLE). UP TO 40 GLIDERS PLUS TUG ACFT OPR.
 GLIDERS WILL REMAIN CLEAR OF CONTROLLED AIRSPACE. SEE SEPARATE DAILY
 NOTAM AND GLIDINGTASKS.CO.UK FOR GLIDER ROUTES OUTSIDE THIS AREA.
 FOR INFO CTC 01582 691936 OR 119.905MHZ. AR-2025-3211/01.
 LOWER: SFC
 UPPER: 4500FT AMSL
 SCHEDULE: 0800-1700

Analysis and Investigation

NATS Ltd Unit Investigation

Executive summary

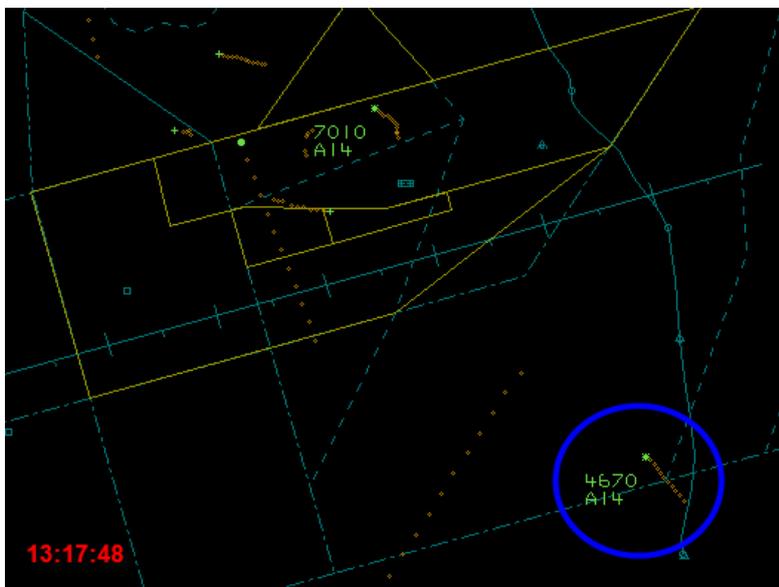
The pilot of [Bell 505 C/S] had been cleared to cross the Luton Zone, VFR, south to north, by the Luton Approach controller to route to the west of Dunstable Downs and was in receipt of a Radar Control Service. The controller passed Traffic Information regarding [DR400 C/S], squawking 7010, to the pilot of [Bell 505 C/S] who reported they believed they had the aircraft on TCAS. The pilot of

[Bell 505 C/S] subsequently notified the controller they had come into close proximity with [DR400 C/S]. Safety Investigations was subsequently notified by the UK Airprox Board the event had been reported as an Airprox.

Description of the event

The pilot of [Bell 505 C/S] reported onto the Luton Intermediate Approach (GW INT) frequency at 1315:03 (all times UTC). The GW INT controller issued QNH 1019hPa and squawk 4670 to the pilot, who read this back correctly and reported flying from a private site near St Albans to M1 Junction 8. The pilot requested to transit Luton controlled airspace to a private site near Leighton Buzzard and requested a Basic Service and Zone clearance. A Basic Service was agreed with the pilot, and the Mode C of the helicopter was verified.

A clearance was issued by the GW INT controller at 1316:09 to make a right turn from their present position to Hyde and cleared the pilot for entry into the Luton Control Zone not above 2000ft, VFR. The pilot requested instead to route, “west of Dunstable Downs,” on track to their destination. A revised clearance was issued by the GW INT controller, “from your present position you can route VFR, not above altitude one thousand five hundred feet to the west of Dunstable Downs. Be advised, Dunstable are active with gliding.” The pilot read back the clearance and noted, “copy the traffic information.”



At 1317:48, the GW INT controller advised the pilot of [Bell 505 C/S] (highlighted in blue) that they were in receipt of Radar Control Service. (Figure 1)

Figure 1

The GW INT controller provided updated Traffic Information to the pilot of [Bell 505 C/S] at 1320:58, advising they had, “possible glider traffic in your twelve o’clock at a range of three miles, opposite direction descending out of two thousand four hundred feet.” The pilot responded, “copy that, I’m keeping a good lookout, I think I’ve got him on TCAS at the moment actually.” (Figure 2).

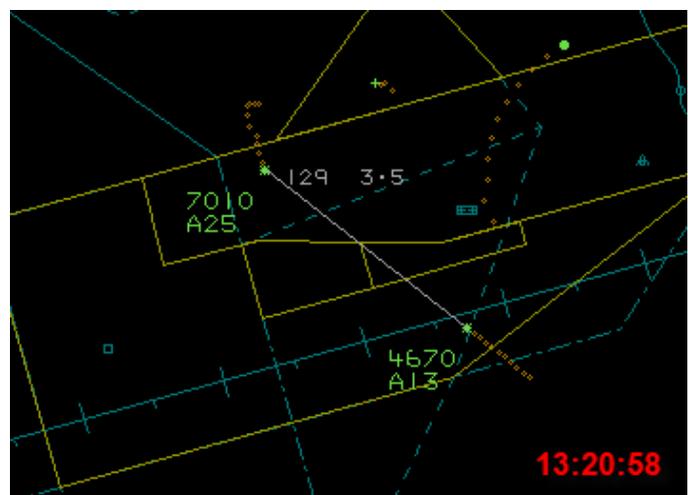


Figure 2

The traffic called by the GW INT controller was identified by Safety Investigations using Mode S information as [DR400 C/S], a Robin DR400 squawking 7010, which subsequently landed at Dunstable.

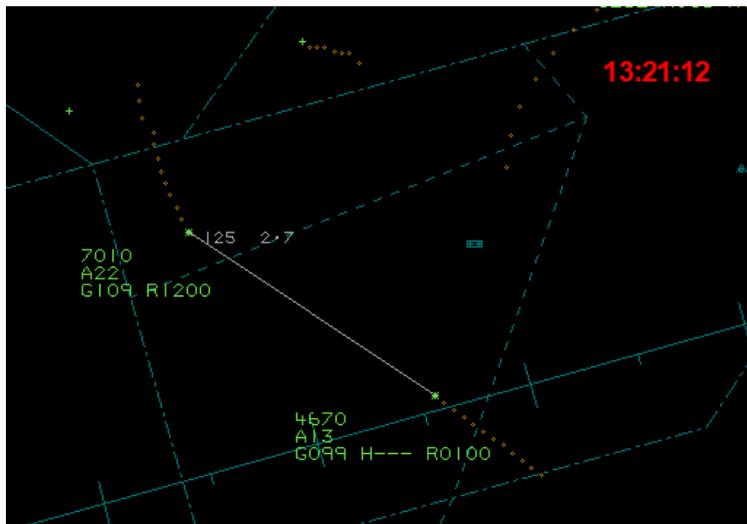


Figure 3

Although there were no defined separation requirements applicable, for RAT incident assessment purposes the event was assessed against 3NM/1000ft minima, as detailed within [the relevant documentation].

[Bell 505 C/S] was heading 309° and [DR400 C/S] heading 154°. (Figure 3)



Figure 4

The closest point of approach between [Bell 505 C/S] (4670) and [DR400 C/S] (7010) was recorded at 1322:00 and measured on the Multi-Track Radar as 0.0NM and 100ft. (Figure 4)

The pilot of [Bell 505 C/S] reported onto the GW INT frequency at 1322:16 and advised the controller, *"I don't know if you noticed that traffic about one minute ago was almost head on with me, very similar height."* The GW INT controller advised the pilot of [Bell 505 C/S] that they had been dealing with aircraft in another part of the sector at the time and therefore had not observed how close the aircraft had been. The pilot of [Bell 505 C/S] noted, *"no problem, I dropped the height a bit, I got him on TCAS but he obviously hadn't seen me."*

Investigation

Information available to the investigation included:

CA4114 from the Luton Intermediate Approach controller.
Pilot report from [Bell 505 C/S].
LTC MATS Part 2.
SI109.25 SWN.

The UK Airprox Board advised Safety Investigations of a reported Airprox between [Bell 505 C/S] and [DR400 C/S].

Initially, the GW INT controller had cleared [Bell 505 C/S] to route via Hyde, which would have taken the aircraft to the east of the Dunstable Downs area via the Luton airport overhead. However, the pilot then requested to route direct to their destination and to the west of Dunstable Downs.

SI109.25 SWN was published on 10th July 2025 relating to this scenario, which updated LTC MATS Part 2, LTN 10.5.9. The SI stated:

TC Luton shall not issue a clearance to any IFR flight to operate within activated airspace.

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 **Dunstable airspace activation using the following phraseology: "Caution, intense gliding activity"** and if necessary, shall advise the pilot to avoid the immediate vicinity of Dunstable Downs. **If the controller observes the track of a transiting aircraft to be proximate to the Dunstable Downs overhead, they shall advise the pilot to avoid this vicinity.** TC Luton shall pass generic traffic information based on reported or observed activity.

Consideration should be given to the potential for activity in the Chiltern Ridge Soaring Area during daylight hours when Dunstable airspace has not been activated, and where appropriate, pilots shall be notified as above.

In this case, [Bell 505 C/S] was a VFR aircraft which was routeing to the west of Dunstable Downs. Although the specific phraseology regarding intense gliding activity was not used, the pilot was notified that Dunstable Downs was active. As the pilot had reported routeing to the west of Dunstable, there was no requirement to advise the pilot to avoid the immediate vicinity of Dunstable Downs. Generic Traffic Information was passed to the pilot, followed by further specific Traffic Information on observed activity.

The portion of the airspace where this event occurred was the Luton CTR, which was Class D airspace. Within Class D airspace there were no requirements for separation of VFR flights, although Traffic Information must be passed, which took place in this instance. A letter of agreement between the London Gliding Club and NATS included the text of the LTC MATS Part 2 above. As such, it was known to the London Gliding Club that VFR crossing traffic may be permitted to operate in this area.

Conclusions

The Airprox occurred when the pilot of [Bell 505 C/S], VFR, passed in proximity to [DR400 C/S] which was operating VFR within the Dunstable Downs gliding area.

Closest Point of Approach occurred at 1322:00 and was recorded on Multi-Track Radar as 0.0NM and 100ft. Traffic Information had been passed to the pilot of [Bell 505 C/S] and there were no other separation requirements.

The incident was resolved by the pilot of [Bell 505 C/S] descending to avoid [DR400 C/S].

Recommendations and Actions

There are no Safety Investigations recommendations as a result of this Investigation.

CAA ATSI

ATSI has reviewed the NATS investigation and has nothing further to add.

UKAB Secretariat

The DR400 and Bell 505 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 head-on or nearly so then both pilots were required to turn to the right.⁴ If the incident geometry is considered as converging then the DR400 pilot was required to give way to the Bell 505.⁵ An aircraft operated on or in the vicinity of an aerodrome shall conform with or avoid the pattern of traffic formed by other aircraft in operation.⁶

Comments

BGA

Dunstable Downs airfield is a very busy gliding site, active 7 days per week, year-round. London Gliding Club (LGC) 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).

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 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."

The Airprox DR400 was one of five SEP tow-planes that launched 19 gliders from Dunstable Downs airfield on the afternoon in question as part of a gliding competition based there between Saturday 26th July and Sunday 3rd August 2025 (inclusive). Particularly intense gliding activity was therefore expected in the uncontrolled airspace in the vicinity of Leighton Buzzard during a 1-2 hour window at different times each contest day, and NOTAM H2864/25 was issued several weeks beforehand to warn other airspace users of this.

At the time of the Airprox, the DR400 was returning from its 3rd competition launch of the day, with gliders releasing from tow at 2000ft AAL (2500ft AMSL) about 1NM SE of Leighton Buzzard. Figure 5 shows the DR400 track up to CPA on the Airprox flight, and also its two previous flights launching other gliders, departing Dunstable Downs at 1301 and 1308 (red track), with the Airprox Bell 505 track up to CPA in purple. The red flag marks CPA.

³ (UK) SERA.3205 Proximity.

⁴ (UK) SERA.3210 Right-of-way (c)(1) Approaching head-on.

⁵ (UK) SERA.3210 Right-of-way (c)(2) Converging.

⁶ (UK) SERA.3225 Operation on and in the Vicinity of an Aerodrome.

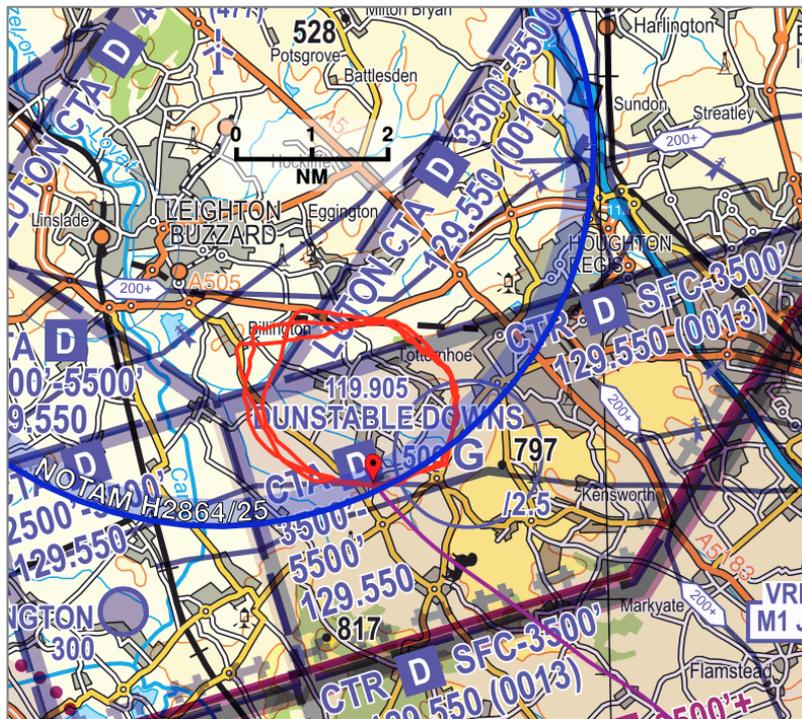


Figure 5

The DR400's aero-tow rope, trailing behind and below it after the glider had released, would have been around 50-65m in length. ANO 2016 §87(2) specifies that the length of the combination of towing aircraft, tow rope and glider in flight must not exceed 150m.

Summary

An Airprox was reported when a Robin DR400 and a Bell 505 flew into proximity near Dunstable Downs Gliding Site at 1322Z on Saturday 2nd August 2025. Both pilots were operating under VFR in VMC in the Class D airspace of the Luton CTR, the Bell 505 pilot in receipt of a Radar Control Service from Luton and the DR400 pilot operating autonomously without an ATS by prior agreement.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings, GPS 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.

Members first discussed the gliding activity at Dunstable Downs and its notified associated airspace areas within the Luton CTR. It was noted that the relevant UK AIP entry recommended that 'Pilots of aircraft operating under VFR, or on a Special VFR clearance are advised to avoid these areas if at all possible.'. This was not an instruction to stay clear of gliding activity in the Luton CTR but did offer mitigation to mid-air collision due to the 'Intense gliding, hang-gliding and paragliding activity' that takes place within those areas. Given that there had also been NOTAM notification of a gliding competition on the day, members felt that the Bell 505 pilot could have usefully contacted the gliding site, either before flight on the notified phone number or perhaps in-flight on the notified frequency if workload had allowed, in order to establish the competition start time and hence increase situational awareness and reduce the risk of conflict. The DR400 pilot had been on their way back to Dunstable Downs and had been operating iaw the Letter of Agreement between London Gliding Club and Luton Airport. They had had no situational awareness of the Bell 505's planned route (**CF3**), their incompatible EC had resulted in no TAS warning (**CF4**) and the see-and-avoid barrier had functioned at a late stage (**CF6**) when they had seen the helicopter and had taken avoiding action, cognisant of the added risk of their trailing tow-rope. In contrast, the Bell 505 pilot had had situational awareness on the DR400 from the Traffic Information passed by the Luton controller and their TCAS alert (**CF5**) but had elected to maintain

course until they had seen the DR400 at a late stage (**CF6**) and had then taken avoiding action (**CF2**). Members wondered whether the Bell 505 pilot could have used their situational awareness preemptively by changing course in order to increase separation at CPA. Turning to ATC, it was established that STCA had not been used because the aircrafts' SSR transponder codes had been outside the select frame of the Luton STCA (**CF1**). Nevertheless, the Board commended the Luton controller for having passed Traffic Information on the DR400 when this was not required by the Letter of Agreement. A GA member wondered whether the Bell 505 pilot could usefully have transited the Luton CTR at a higher altitude, which would have mitigated the risk of conflict with traffic descending into and climbing away from Dunstable Downs. However, it may have put the helicopter into conflict with glider traffic in the area of the NOTAM (to the northwest of the Airprox location).

With regard to risk, Board members agreed that separation at CPA had been much reduced with each pilot seeing the other aircraft at a late stage and that the added presence of a tow-rope on the DR400 had contributed to a situation where safety had been much reduced, Risk B (**CF7**).

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2025188			
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification
Ground Elements				
• Electronic Warning System Operation and Compliance				
1	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				
• Situational Awareness of the Conflicting Aircraft and Action				
2	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
3	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
• Electronic Warning System Operation and Compliance				
4	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
5	Contextual	• ACAS/TCAS TA	An event involving a genuine airborne collision avoidance system/traffic alert and collision avoidance system traffic advisory warning triggered	
• See and Avoid				
6	Human Factors	• Identification/ Recognition	Events involving flight crew not fully identifying or recognising the reality of a situation	Late sighting by one or both pilots
• Outcome Events				
7	Contextual	• Near Airborne Collision with Aircraft	An event involving a near collision by an aircraft with an aircraft, balloon, dirigible or other piloted air vehicles	

Degree of Risk:

B.

Safety Barrier Assessment⁷

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

Ground Elements:

Electronic Warning System Operation and Compliance were assessed as **not used** because the SSR codes assigned to the DR400 and Bell 505 were outside the select frame of the Luton STCA.

Flight Elements:

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because the Bell 505 pilot had received Traffic Information and a TCAS alert regarding the presence of the DR400, but did not take action until they were visual with the aircraft.

See and Avoid were assessed as **partially effective** because both pilots saw the other aircraft at a late stage.

Airprox Barrier Assessment: 2025188		Within Controlled Airspace						
Barrier	Provision	Application	Effectiveness					
			Barrier Weighting					
			0%	5%	10%	15%	20%	
Ground Element	Regulations, Processes, Procedures and Compliance	✓	✓	[Green bar to 20%]				
	Manning & Equipment	✓	✓	[Green bar to 15%]				
	Situational Awareness of the Confliction & Action	✓	✓	[Green bar to 15%]				
	Electronic Warning System Operation and Compliance	✓	○	[Red bar to 10%]				
Flight Element	Regulations, Processes, Procedures and Compliance	✓	✓	[Green bar to 5%]				
	Tactical Planning and Execution	✓	✓	[Green bar to 5%]				
	Situational Awareness of the Conflicting Aircraft & Action	✗	✓	[Red bar to 10%]				
	Electronic Warning System Operation and Compliance	⚠	✓	[Green bar to 15%]				
	See & Avoid	⚠	⚠	[Yellow bar to 5%]				
Key:								
Provision	Full	Partial	None	Not Present/Not Assessable	Not Used			
Application	✓	⚠	✗	●	○			
Effectiveness	Green	Yellow	Red	Grey	Red box			

⁷ The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).