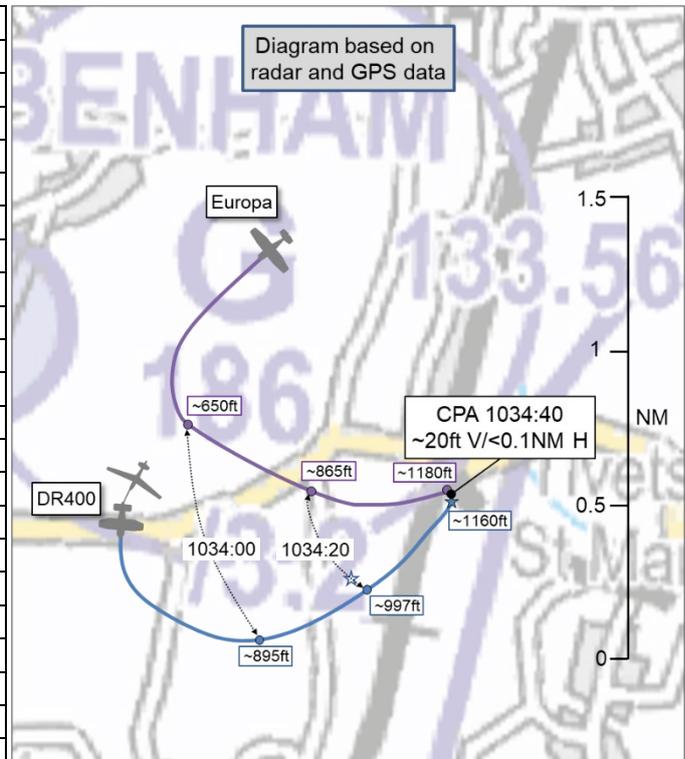


AIRPROX REPORT No 2025178

Date: 10 Aug 2025 Time: 1035Z Position: 5227N 00110E Location: E of Tibenham Airfield

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	DR400	Europa
Operator	Civ FW	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	None ¹	None
Provider	N/A	N/A
Altitude ²	~1160ft	~1180ft
Transponder	A	A, C, S ³
Reported		
Colours	White/Red	White/Blue
Lighting	Beacon, anti-colls	Wingtip strobes
Conditions	VMC	VMC
Visibility	>10km	5-10km
Altitude	1100ft AGL	1400ft
Altimeter	QFE (1028hPa)	QNH (1028hPa)
Heading	030°	070°
Speed	75kt	80kt
ACAS/TAS	FLARM	SkyEcho
Alert	None	None
Separation at CPA		
Reported	50ft V/0ft H	Not seen
Recorded	~20ft V/<0.1NM H	



THE DR400 PILOT reports that their tug and glider combination departed RW21 at Tibenham and performed a left turn-out to climb to 2000ft AGL on a northeasterly heading. The conflicting aircraft departed after the tug and glider combination and must have turned sharply after departure to the left, effectively putting it on a potential collision course with the combination.

The pilot noted that the tug with glider under tow were climbing half a mile southeast of the airfield and the other aircraft was in their 8 o'clock position 50ft below, crossing left-to-right. No avoiding action was taken as the tug and glider combination was unable to manoeuvre before the threat had passed.

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

THE EUROPA PILOT reports that the tug/glider [combination] departed approximately 1-2min ahead of their take-off. After passing the winch, which was located at the upwind end of RW21, they started a climbing left turn onto an approximate heading of 120°. After passing 1200ft and estimating that they were clear of the downwind joining lane for RW21, they turned further left onto a heading of about 060°. It was at about this time that they were alerted by the glider pilot's radio call saying "(expletive) *what was that?*", and the tug pilot's calm reply saying, "*I saw it*". It was then they saw the tug/glider combination diverging from them close below and realised they must have passed very close to each other.

The Europa pilot explained that, as an experienced tug-master themselves, they had expected the tug and glider to have possibly gone straight ahead on departure and had been surprised to note that their

¹ Although there was no service provider at Tibenham, both the DR400 and Europa pilots were listening out on the Tibenham Traffic frequency.

² Altitudes are approximate and should not be used to infer relative aircraft positions.

³ The Europa's transponder emissions were only detected after the estimated time of CPA.

first sighting of the tug/glider combination was beneath them with approximately 100ft vertical and 200ft (61m) lateral separation (to their left, relative bearing 300°) while the aircraft were already diverging. They considered that 'both aircraft were climbing' as a contributory factor and that they had been focusing entirely to their right and below in anticipation of outclimbing the tug/glider combination ahead of them. On reflection, the pilot observed that they were flying solo in the Europa, with no-one in the right-hand seat, and that it might have helped had there been someone there on this occasion.

It was further noted that the electronic conspicuity device fitted in the Europa displayed ADS-B traffic only on their navigation display.

Factual Background

The weather at Norwich Airport was recorded as follows:

METAR COR EGSW 101020Z 25005KT 180V320 9999 SCT033 22/12 Q1028 NOSIG

Analysis and Investigation

UKAB Secretariat

An analysis of the NATS radar replay was undertaken and the glider-on-tow was positively identified using Mode S data, first seen at 1033:22 (Figure 1).

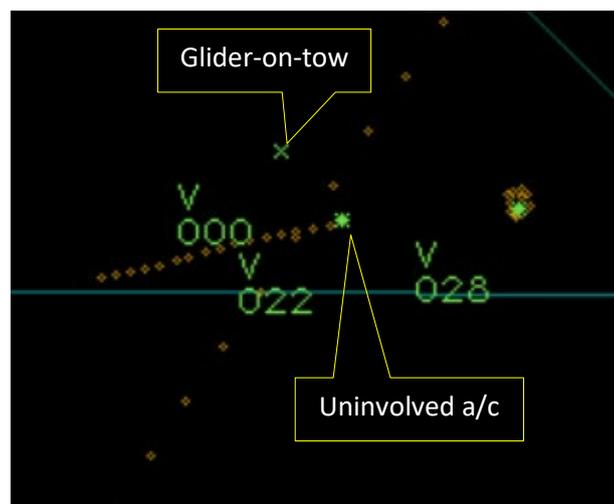


Figure 1 – Time 1033:22

At 1034:15 the DR400 was seen on radar, identified by the 'glider towing' squawk 0034 (Figure 2).

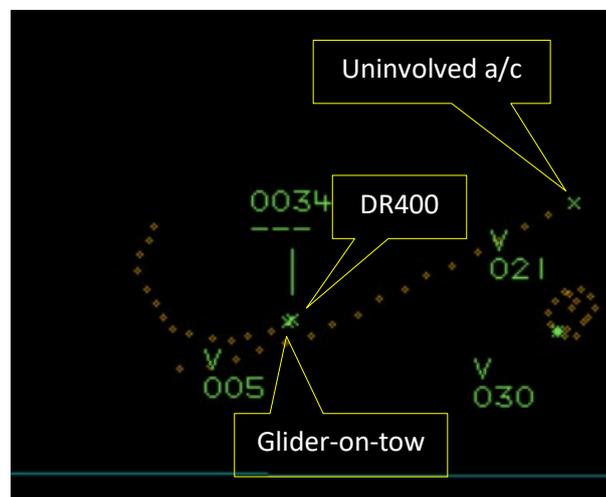


Figure 2 – Time 1034:15

At 1037:14 it appeared that the DR400 released the glider-on-tow.

There were no primary or secondary tracks detected for the Europa at the time of the Airprox. However, it was detected minutes later, using Mode S data, at 1037:30.

Analysis of aircraft tracking software was undertaken and both the glider-on-tow and the DR400 were identified using data specific to their EC devices at 1032:47, with the glider-on-tow identified using ADS-B data at 1033:40.

The pilots of both the glider-on-tow and the Europa submitted their GPS navigation data from which the CPA between the DR400 and the Europa was assessed to have occurred at 1034:40, with a separation of approximately 20ft vertically and less than 0.1NM laterally as the Europa was seen to have passed slightly above and 0.1NM ahead of the glider-on-tow at a similar level, with both aircraft climbing.

The DR400 and Europa pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard.⁴ If the incident geometry is considered as overtaking then the DR400 pilot with a glider-on-tow had right of way and the Europa pilot was required to keep out of the way of the other aircraft by altering course to the right.⁵

Comments

AOPA

This was a very close Airprox, in Class G airspace, without any form of ATC involvement. Had there been a common form of Electronic Conspicuity (EC) equipment, this Airprox could have been avoided. AOPA hopes the Department for Transport and the CAA decide on a common form of EC device before there is a mid-air collision leading to loss of life.

BGA

Tibenham is an unlicensed airfield owned and operated by Norfolk Gliding Club (NGC), with around 25 non-gliding-related GA aircraft also based there. The airfield sees about 6000 gliding-related movements (including both winch and aerotow launches) and 1600 non-gliding-related aircraft movements annually. No Air Traffic Service is provided; pilots use the assigned VHF radio channel (see AIP ENR 5.5 and CAA VFR charts) to broadcast their intentions using "Unattended Aerodrome" phraseology (see CAP 413 section 4.162 et seq).⁶

In common with many other UK gliding clubs, NGC strictly requires that all gliding-related traffic departing Tibenham be equipped with an operating EC unit of the type fitted to almost all UK gliders (as indeed were both the DR400 glider tug and the on-tow glider involved in this incident). There is anecdotal and statistical evidence that this system mitigates mid-air collision risk between aircraft to which it is fitted, and the BGA encourages its use by all aircraft owners operating at BGA member club sites.⁷ However, NGC does not mandate that non-gliding-related aircraft based at Tibenham use this EC system (although many voluntarily do so, including a locally-based GA flight school).

Summary

An Airprox was reported when a DR400 and a Europa flew into proximity east of Tibenham Airfield at 1035Z on Sunday 10th August 2025. Both pilots were operating under VFR in VMC and listening out on the Tibenham Traffic frequency.

⁴ (UK) SERA.3205 Proximity.

⁵ (UK) SERA.3210 Right-of-way (c)(3) Overtaking

⁶ Unattended Aerodrome phraseology. [CAP 413](#) section 4.162 et seq.

⁷ BGA's ['Lookout – Supported by Technology'](#)

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings, ADS-B and GPS track data. 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 DR400 tug pilot with glider-on-tow and noted that the pilot had been monitoring the Tibenham frequency as they had departed and members determined, therefore, that the DR400 pilot would likely have heard the Europa pilot's standard departure calls over the R/T shortly after. The Board further noted that the DR400 had been fitted with electronic conspicuity (EC) equipment common to that used in gliders, but that it had not detected the presence or position of the Europa, and members agreed that the DR400 pilot had, therefore, only had generic situational awareness of the presence of the Europa from the R/T calls (**CF4**) and that the EC device had not been compatible with that of the Europa (**CF5**). The Board further noted that, although the tug pilot was heard to say on the radio "*I saw it*" in response to the glider pilot's exclamation on seeing the Europa, it had been apparent that the DR400 tug pilot's sighting had occurred at or immediately after the point of CPA, and members agreed that this had been an effective non-sighting of the Europa by the DR400 pilot (**CF6**).

Moving their attention to the actions of the Europa pilot, the Board reflected on the pilot's intentions, rationale for departure timing, and routing and noted that the pilot's plan had been to avoid the previously departed tug-glider combination. The Board felt that, as an experienced tug pilot, the Europa pilot's mental model had been based on their own prior experience and expectations and not of one briefed by the departing tug pilot. Members agreed that, as the pilot had not considered the actual position of the DR400 with glider-on-tow, this had resulted in an inadequate plan adaptation for this scenario (**CF2**). The Board questioned why the Europa pilot had neither communicated their intended departure route nor sought clarification of the DR400 pilot's position or intentions to ensure that their plan would achieve the envisioned level of separation. Members agreed that, on this occasion, the pilot had demonstrated an ineffective communication of their intentions (**CF1**) and had equally not requested additional information relevant to the planned departure of the tug/glider combination (**CF3**). The Board noted that the Europa had been fitted with an EC device that may have detected and displayed both the tug and the glider, had an appropriate subscription been in force, but this had not been the case. Members familiar with operations at Tibenham highlighted the recommendation for other GA aircraft based there to install EC devices compatible with those fitted to gliders and, although this was not mandated, the Board felt that the Europa pilot had missed the opportunity to potentially improve their own and others' safety for very little cost. Members agreed that, as a result, the Europa's EC equipment had been incompatible with that of the tug and glider (**CF5**) and that, without information available to them from either the R/T or EC device to challenge or weaken their expectations, the Europa pilot had had inaccurate situational awareness of the DR400's position (**CF4**). The Board noted that the Europa pilot had been, seemingly, diligent in monitoring their position for the left turns during their departure and looking out to the right, however, members agreed that the Europa pilot had remained unsighted on the DR400 tug and glider combination (**CF6**) until after CPA.

In bringing their conversation to a conclusion and determining a risk category, the Board noted that neither the DR400 pilot nor the Europa pilot had been aware of the other aircraft's position, and that neither pilot had sighted the other until at or after the point of CPA. Members agreed that, with approximately 20ft vertical separation and less than 0.1NM horizontally, separation had been reduced to a bare minimum which had only stopped short of an actual collision through chance (**CF7**). As such, the Board assigned a Risk category A to this event.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

2025178			
Factor	Description	ECCAIRS Amplification	UKAB Amplification
Flight Elements			
• Tactical Planning and Execution			

1	Human Factors	• Accuracy of Communication	Events involving flight crew using inaccurate communication - wrong or incomplete information provided	Ineffective communication of intentions
2	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 adaptation
• Situational Awareness of the Conflicting Aircraft and Actioned				
3	Human Factors	• Lack of Communication	Events involving flight crew that did not communicate enough - not enough communication	Pilot did not request additional information
4	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				
5	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
• See and Avoid				
6	Human Factors	• Monitoring of Other Aircraft	Events involving flight crew not fully monitoring another aircraft	Non-sighting or effectively a non-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: A.

Safety Barrier Assessment⁸

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

Flight Elements:

Tactical Planning and Execution was assessed as **partially effective** because the Europa pilot had not considered the actual position of the DR400 with glider-on-tow and could have passed their departure intentions on the Tibenham Traffic frequency.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **partially effective** because the DR400 pilot only had generic situational awareness of the Europa's departure routeing and the Europa pilot had inaccurate situational awareness of the position of the DR400 and glider-on-tow.

Electronic Warning System Operation and Compliance were assessed as **ineffective** because the electronic conspicuity device fitted in the DR400 had been unable to detect the Europa, and the Europa's electronic conspicuity device had been unable to detect the DR400.

See and Avoid were assessed as **ineffective** because the Europa pilot did not see the DR400 and glider-on-tow until after CPA, and the DR400 pilot had seen the Europa at or around the point of CPA.

⁸ 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: 2025178		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 Confliction & 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:							
	Full	Partial	None	Not Present/Not Assessable	Not Used		
Provision	●	●	●	●	○		
Application	●	●	●	●	○		
Effectiveness							