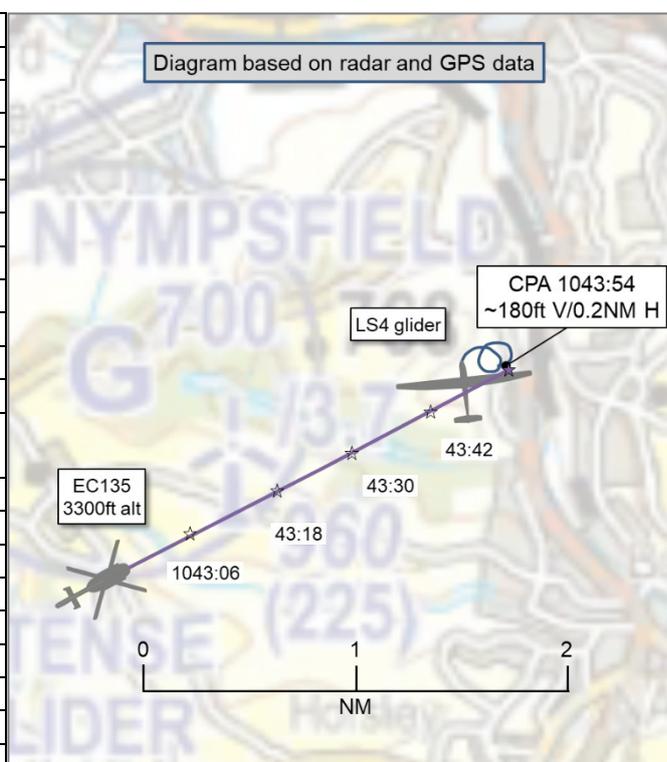


AIRPROX REPORT No 2020083

Date: 29 Jul 2020 Time: 1044Z Position: 5143N 00214W Location: 2NM E Nympsfield

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	EC135	LS4
Operator	Civ Helo	Civ Gld
Airspace	London FIR	London FIR
Class	G	G
Rules	IFR	IFR ¹
Service	Basic	Listening Out
Provider	Gloucester	BGGC ²
Altitude/FL	3300ft	~3110ft
Transponder	A, C, S	Not fitted
Reported		
Colours	Red	White, red
Lighting	Nav, strobe, landing	Not fitted
Conditions	IMC	IMC ¹
Visibility	30NM	50km
Altitude/FL	FL030	2949ft
Altimeter	SPS	QFE
Heading	045°	210°
Speed	120kt	50kt
ACAS/TAS	Not fitted	FLARM
Alert	N/A	None
Separation		
Reported	200ft V/0.25NM H	150ft V/500m H
Recorded	~180ft V/0.2NM (370m) H	



THE EC135 INSTRUCTOR reports conducting IF training, IFR in IMC but 200ft clear of cloud, in the transit towards REKLO, the IAF for the RNP 27 approach at Gloucester. The Training Flight was being flown by the P2 as the handling pilot in the LHS with the Instructor in the RHS and autopilot upper level modes engaged [examples of which are heading and altitude hold]. The Instructor had briefed the presence of Nympsfield glider site and the hazard of a transit to the IAF at the minimum altitude within the TAA, as the track would pass close to the site and its associated winch launch. The decision was made to transit to the south of the glider site and maintain VCF³ below cloud at a level/altitude that would be above the maximum winch launch altitude of the site. Nearing the glider site, a glider was sighted ahead and slightly right by the Instructor, who called "glider" and made a cyclic control input to turn left away from the glider. The glider pilot made a similar avoiding turn to the left and rocked wings to acknowledge. Approximately 3 minutes later, at 1045 UTC, a further glider was sighted by the Instructor, about ½NM ahead and slightly right. He made a cyclic input to the left to avoid and the glider in conflict also turned left and descended below.

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

THE LS4 PILOT reports climbing in a right hand thermalling turn when a red helicopter was seen heading straight towards the glider in level flight. The LS4 pilot promptly turned hard right and dived, whilst maintaining visual contact with the helicopter to confirm separation. A couple of seconds after initiating the right turn the LS4 pilot saw the helicopter initiate a right turn also, presumably because the helicopter pilot had seen the glider.

¹ Reported as VFR in VMC but above 3000ft amsl within 1500m of cloud and therefore IFR in IMC, but clear of cloud.

² Bristol and Gloucestershire Gliding Club.

³ Visual Contact Flight. CAP612

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

THE GLOUCESTER CONTROLLER reports that he had no recollection of the incident or notification that reporting action would be taken. Therefore, he was not able to report details of the Airprox.

Factual Background

The weather at Gloucester was recorded as follows:

METAR EGBJ 291050Z 21007KT 170V250 9999 BKN028 20/11 Q1020=

Analysis and Investigation

UKAB Secretariat

The EC145 and LS4 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard⁴. If the incident geometry is considered as head-on or nearly so then both pilots were required to turn to the right⁵.

Comments

BGA

Gliders are likely to be encountered when passing close to gliding sites. We commend the EC135 crew for their awareness of and specific briefing for the routing past Nympsfield, although they would have reduced the likelihood of encountering gliders by giving Nympsfield a wider berth and/or making a radio call on the BGGC frequency to alert gliders of their transit.

Summary

An Airprox was reported when an EC135 and an LS4 glider flew into proximity near Nympsfield glider site at 1044Z on Wednesday 29th July 2020. Both pilots were operating under IFR in IMC but clear of cloud, the EC135 pilot in receipt of a Basic Service from Gloucester and the LS4 pilot not in receipt of a FIS.

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.

Due to the exceptional circumstances presented by the coronavirus pandemic, this incident was assessed as part of a 'virtual' UK Airprox Board meeting where members provided a combination of written contributions and dial-in/VTC comments.

Members first discussed the EC135 crew's planned routing and commended them for their awareness of the vicinity of Nympsfield gliding site and their associated planning considerations. However, it was felt that the weather conditions were such that the crew may perhaps have been better placed by assuming a high level of gliding activity in the vicinity of the gliding sites at Nympsfield and Aston Down, and used the northern arm of the RNP27 approach or flown at a higher altitude, above the cloud-base (**CF3**). The Board acknowledged that there was no onus on the EC135 crew to take either course of action and that Class G airspace is accessible to all, with all pilots having an equal responsibility for collision avoidance. Members wondered whether the EC135 pilot could have contacted Nympsfield in order to improve SA (**CF4**) and it was pointed out that ICFs for civilian gliding sites are not included in

⁴ SERA.3205 Proximity.

⁵ SERA.3210 Right-of-way (c)(1) Approaching head-on.

the UK AIP (or depicted on VFR charts). However, ICFs are listed at ENR 5.5 (AERIAL SPORTING AND RECREATIONAL ACTIVITIES) for parachuting sites, military training aerodromes and gliding sites at military airfields. The Board discussed this apparent anomaly and agreed that they would formally recommend that, **'The CAA include Glider Site ICFs, as supplied by the BGA, in the UK AIP ENR 5.5'**. Members discussed other forms of detection and noted that, unfortunately, the aircraft were not compatible from an EC point of view (CF5); the Gloucester controller was not required to monitor the EC135 (CF1) (and, the Board felt, would likely not have observed the glider on radar anyway) and only had generic SA that gliding would be taking place in the vicinity of Nympsfield (CF2). Members agreed that both pilots had seen the other aircraft in time to take effective avoiding action, a risk C, and that this incident could best be characterised as a conflict in the FIR (CF6).

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

2020083			
CF	Factor	Description	Amplification
Ground Elements			
• Situational Awareness and Action			
1	Contextual	• ANS Flight Information Provision	Not required to monitor the aircraft under the agreed service
2	Contextual	• Situational Awareness and Sensory Events	The controller had only generic, late or no Situational Awareness
Flight Elements			
• Tactical Planning and Execution			
3	Human Factors	• Flight Planning and Preparation	
• Situational Awareness of the Conflicting Aircraft and Action			
4	Contextual	• Situational Awareness and Sensory Events	Pilot had no, late or only generic, Situational Awareness
• Electronic Warning System Operation and Compliance			
5	Technical	• ACAS/TCAS System Failure	Incompatible CWS equipment
• See and Avoid			
6	Contextual	• Loss of Separation	A conflict in the FIR

Degree of Risk: C.

Recommendation: The CAA include Glider Site ICFs, as supplied by the BGA, in the UK AIP ENR 5.5.

Safety Barrier Assessment⁶

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

Ground Elements:

Situational Awareness of the Confliction and Action were assessed as **not used** because the controller was not required to monitor the EC135 position or potential conflicting traffic.

Flight Elements:

Tactical Planning and Execution were assessed as **partially effective** because further mitigations were available to the EC135 crew to avoid the locality of likely levels of high gliding activity.

⁶ The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).

Situational Awareness of the Conflicting Aircraft and Action were assessed as **partially effective** because only generic SA was available to the EC135 crew in the proximity of Nympsfield gliding site.

Electronic Warning System Operation and Compliance were assessed as **ineffective** because the EC135 was not compatible with the LS4 FLARM.

