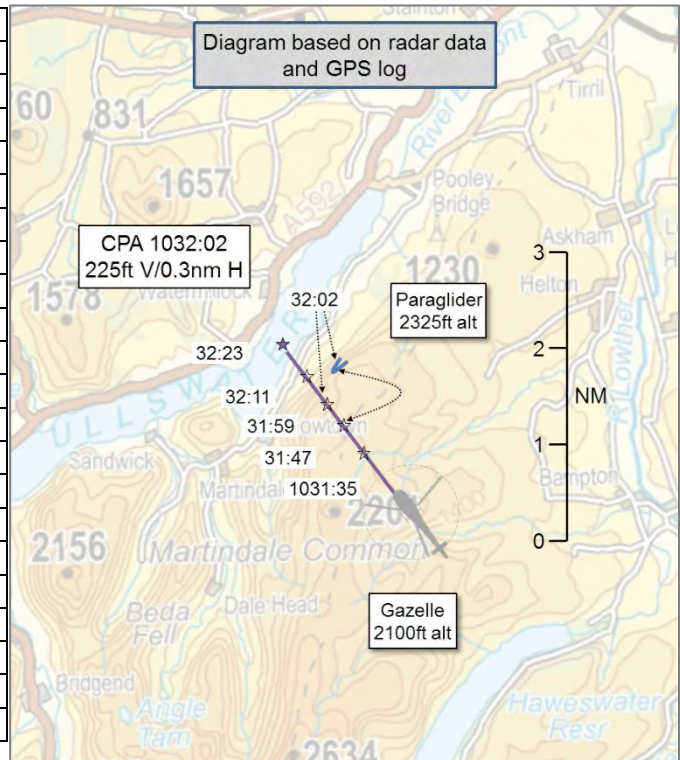


AIRPROX REPORT No 2018137

Date: 23 Jun 2018 Time: 1032Z Position: 5435N 00251W Location: Barton Fell

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Paraglider	Gazelle
Operator	Civ Gld	Civ Helo
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	None	None
Altitude/FL	2100ft	2325ft
Transponder	Not fitted	A, C, S
Reported		
Colours	Green, purple	NK
Lighting	Not fitted	NK
Conditions	VMC	VMC
Visibility	'excellent'	'clear'
Altitude/FL	2300ft	500ft
Altimeter	QFE (NK)	NK
Heading	200°	~310°
Speed	~5kt	~115kt
ACAS/TAS	Not fitted	Not fitted
Separation		
Reported	50m V/150m H	0ft V/0.75nm H
Recorded	225ft V/0.3nm H	



THE PARAGLIDER PILOT reports that he was soaring the northwest face of Barton Fell in 'strong but smooth conditions'. He was 200m above the fell and clearly visible from all directions. At the time of the Airprox he was on an 'into-wind' beat. He heard, and then saw, the helicopter approaching in 'very fast' level flight on an estimated bearing of 315°. He immediately executed a steep turn to increase his silhouette, and made a 180° change of direction. The pilot stated that he was not concerned by physical impact but by the risk of rotor induced turbulence. He stated that he observed the helicopter throughout and that there was no discernible pilot response such as a change in direction, attitude, speed, height or engine noise. He suspected that the helicopter pilot was not aware of his presence. The paraglider pilot noted that Barton Fell is a very popular Lake District soaring site.

He assessed the risk of collision as 'Medium'.

THE GAZELLE PILOT reports that he was surprised to receive notification of an Airprox. He was in transit over open countryside and hills at fairly low level. As he crested a hill, he saw a paraglider at a range of 0.5-1nm in the 2 o'clock, sufficiently far away that he could not tell whether it was powered or not. The pilot noted that the only reason he recalled the event was because he had wondered how the paraglider had got to that location.

He assessed the risk of collision as 'Low'.

Factual Background

The weather at Carlisle and Newcastle was recorded as follows:

- METAR EGNC 231050Z NIL=
- METAR EGNC 231020Z NIL=
- METAR EGNT 231050Z 30009KT 260V320 CAVOK 17/08 Q1027=
- METAR EGNT 231020Z 29008KT 250V330 CAVOK 16/06 Q1027=

Analysis and Investigation

UKAB Secretariat

The paraglider and Gazelle pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard¹. If the incident geometry is considered as converging then the Gazelle pilot was required to give way to the paraglider².

Comments

BHPA

From the statements provided by the two pilots, it appears that each saw the other and neither pilot considered there to be a risk of collision. However, it is completely understandable that the paraglider pilot was duly concerned regarding rotor downwash turbulence, which would have adversely affected the stability of his canopy. Although Barton Fell is a popular free-flying site and likely to be active at weekends if meteorological conditions are favourable, it is unlikely that the Gazelle pilot would have been aware of this fact as it is not marked as a free-flying site on any CAA chart. The BHPA would like to reissue a timely reminder to both rotary and fixed-wing pilots regarding the vulnerability of paraglider pilots' canopies to collapse due to downwash turbulence and vortices caused by their respective aircraft and to try and create as much separation as practical when encountering paraglider, hang glider or paramotor pilots.

Summary

An Airprox was reported when a paraglider and a Gazelle flew into proximity at 1032 on Saturday 23rd June 2018. Both pilots were operating under VFR in VMC, neither pilot in receipt of a service.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, transcripts of the relevant R/T frequencies, radar photographs/video recordings, reports from the air traffic controllers involved and reports from the appropriate ATC and operating authorities.

Although the Board agreed that the Gazelle pilot's transit was probably conducted entirely within the bounds of current legislation, helicopter and GA members opined that he could have 'loaded the dice in his favour' by increasing his altitude in the vicinity of the steep slopes in that area to improve his chances of avoiding other aircraft (and also to provide a safety margin in case of engine failure etc). That he did not do so was presumably because he was not aware of the potential for, or likely location and intensity of paraglider and hang glider operations. Members considered whether this information should be included on the CAA VFR chart but were wary of the problem that many such launches consisted simply of people leaping from a hillside rather than from a formally recognised site. The Board also recalled that Airprox 2013138 had included a recommendation that, 'The BHPA publicise the location of commonly used launch sites to the wider aviation community'. This recommendation had been rejected by the BHPA on the basis that:

'... there are too many sites and variables to chart all of them and only including some may mislead pilots into believing this is an exhaustive list. Furthermore, some sites may be extremely active in favourable weather conditions but then not used for the majority of the time, again misleading pilots into believing it is an unused site. The BHPA notes that the number of Airprox involving its members is an extremely small percentage and the members themselves view the risk of [mid-air collision] as low'.

¹ SERA.3205 Proximity.

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

The Board therefore hoped that this Airprox could serve as a reminder to General Aviation pilots that substantial numbers of paraglider and hang glider pilots may be operating from hills or ridge-lines, especially in mountainous landscapes, when the local wind direction is approximately perpendicular to the feature.

Turning to the cause and risk, members agreed that the helicopter and paraglider pilots had both seen each other in sufficient time to prevent collision. The Gazelle pilot had not considered there to be any requirement to avoid the paraglider further, and members agreed with the BHPA comment that urged other pilots to ensure as much separation as possible from canopy-suspended aircraft in order to mitigate the effects of downwash. For his part, the paraglider pilot had perceived the encounter to be close enough to threaten such downwash and had been able to take effective avoiding action. The cause was therefore agreed to be a conflict in Class G resolved by the paraglider pilot. Turning to the risk, the Board agreed that the paraglider pilot's actions had therefore further mitigated the risk of collision, although they also acknowledged that direct collision was not the only safety issue in this incident: helicopter pilots in particular should note the potential effect of rotor downwash on canopy-suspended aircraft, and make due allowance by affording an appropriate avoiding margin.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A conflict in Class G resolved by the paraglider pilot.

Degree of Risk: C.

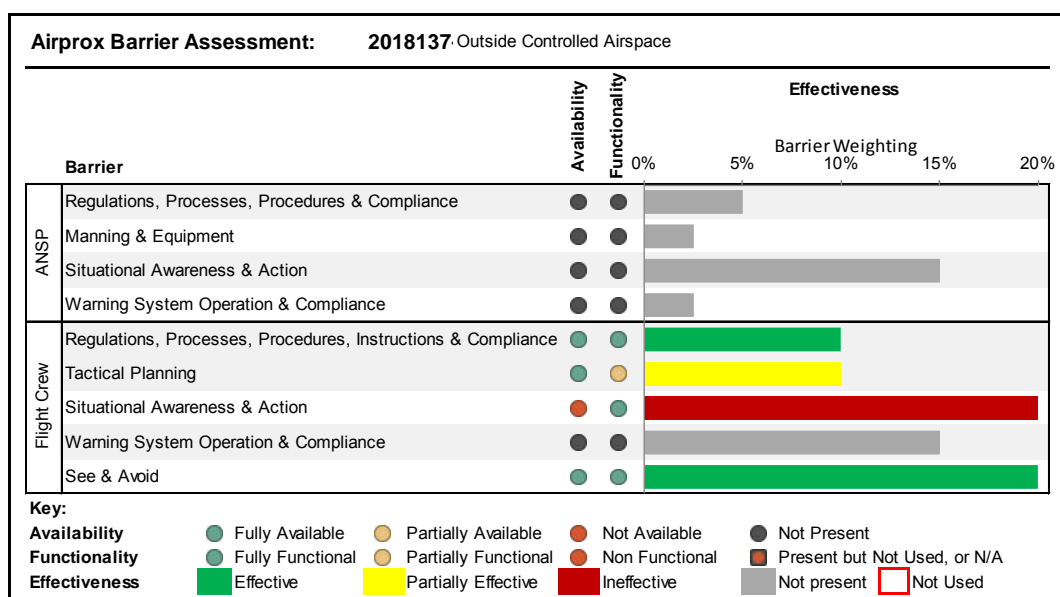
Safety Barrier Assessment³

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

Flight Crew:

Tactical Planning was assessed as **partially effective** because the Gazelle pilot could have chosen a higher level at which to transit.

Situational Awareness and Action were assessed as **ineffective** because neither pilot was aware of the proximity of the other prior to achieving visual contact.



³ The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).