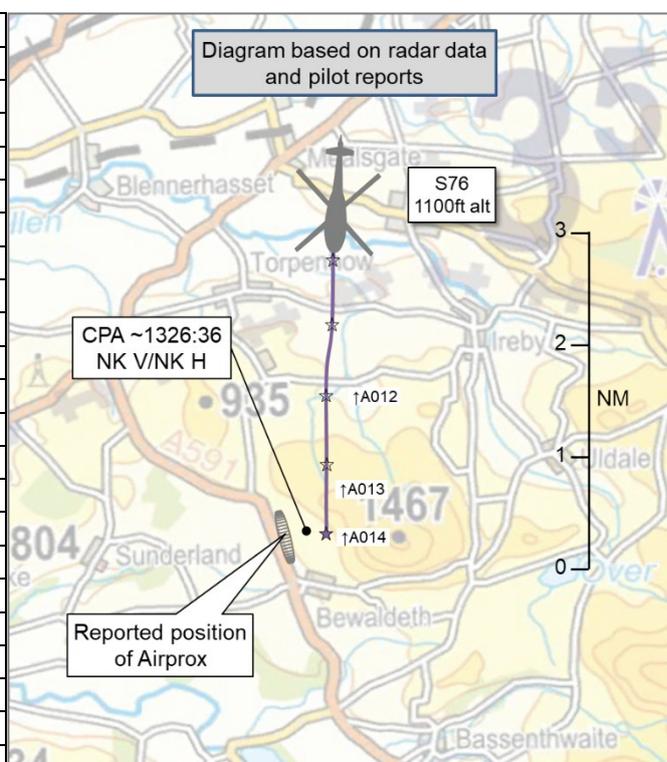


AIRPROX REPORT No 2021137

Date: 03 Aug 2021 Time: 1327Z Position: 5443N 00314W Location: ~5NM NE of Cockermouth

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Paraglider	S76
Operator	Civ Hang	Civ Comm
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	None	None ¹
Altitude/FL	NK	1400ft
Transponder	Not fitted	A, C, S
Reported		
Colours	Blue, grey	White, blue
Lighting	None	Strobes, nav lights
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	20ft agl	1500ft
Altimeter	NK	QNH (1012hPa)
Heading	250°	185°
Speed	25kt	120kt
ACAS/TAS	Not fitted	TCAS II
Alert	N/A	None
Separation		
Reported	400ft V/300m H	800ft V/1NM H
Recorded	NK V/NK H	



THE PARAGLIDER PILOT reports that paragliding activity had been NOTAMed [via the CANP² system] at the site for the day, as training of students was taking place by a [local paragliding school]. At 1326 a helicopter was heard approaching the site at low level from the northeast. The helicopter flew directly through the NOTAM area at around 300-400ft agl while paragliding activity was taking place. The nearest paraglider to the helicopter was a tandem, the pilot reported being very concerned with the helicopter's proximity to them and decided to fly away from the area close to where the helicopter's turbulence would clearly be. The paraglider had been flying in this area shortly before. The tandem pilot had intended to be in the direct area of the helicopter 20-30sec later. The paragliding school Chief Flying Instructor (the reporting pilot) approached the helicopter crew shortly afterwards at [the helicopter's landing site] as the helicopter pilot had not responded to their phone request via the [staff at the landing site] to call them. The helicopter pilot acknowledged that they had been requested to call but had not done so at that point. A constructive conversation took place in which the paragliding CFI informed the helicopter crew that they would be filing an Airprox as both the CFI and the tandem pilot felt flight safety of the paraglider was compromised. The helicopter crew acknowledged they were fully aware of the NOTAM and other paragliding NOTAMS in the area. The logic of choosing to route a large rotary aircraft through an active NOTAM paragliding site must be questioned, they opined.

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

THE S76 PILOT reports that they heard about the Airprox when a paraglider instructor approached the crew at their landing site several hours later. There were several paragliding sites active in the lake district and the crew was aware of the NOTAMS and had been advised by London Information via the RT. Normal see-and-avoid was used – there was no restriction on the airspace and they employed good airmanship principles, particularly regarding awareness of wind and the probable flight paths of any paragliders. The prevailing wind in the area throughout the day was 220/10-15kt. They had visual

¹ The S76 pilot reported being in receipt of a Basic Service from London Information at the time of the Airprox.

² Civil Aircraft Notification Procedure.

contact with the paragliders throughout and did not take any avoiding action as the paragliders were always in sight, upwind and below their track.

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

Factual Background

The weather at Newcastle Airport was recorded as follows:

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METAR EGNT 031320Z VRB02KT 9999 FEW046 21/09 Q1011=
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The NOTAM pertinent to the paragliding activity was retrieved from the NATS AIS website and is detailed below:

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H4851/21 NOTAMN
Q) EGTT/QWPLW/IV/M /W /000/036/5443N00314W003
A) EGTT B) 2108030600 C) 2108031930
E) CIVIL AIRCRAFT NOTIFICATION PROCEDURE - MULTIPLE PARAGLIDERS
OPERATING IN LOW FLYING AREA 17 WI 2NM RADIUS OF PSN
544253N 0031335W (BEWALDETH,CUMBRIA). 2000FT AGL. CTC 07830 281986.
21/08/015/LFC
F) SFC G) 3600FT AMSL)
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Analysis and Investigation

NATS Safety Investigations

A review of the logs and RT recordings of London FIS and Scottish FIS was undertaken. Neither aircraft involved with this event were in communication with London FIS or Scottish FIS at the time of the event.

UKAB Secretariat

An analysis of the NATS radar replay was undertaken. The S76 was detected by the NATS radars shortly after departure and could be seen climbing on a southerly track to an altitude of 1100ft initially. As the S76 approached the area of the reported Airprox the aircraft climbed to 1400ft and passed the reported position of the Airprox at that altitude (see Figure 1). The paraglider was not detected by the NATS radars and the paraglider pilot was unable to supply a GPS log file of their flight.

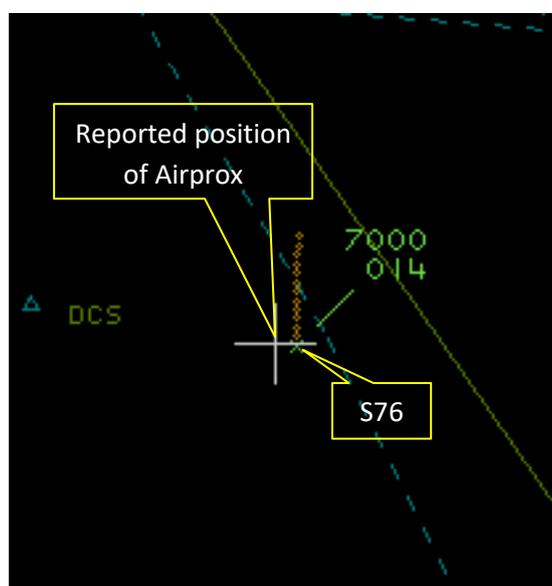


Figure 1 – 1326:36 – Estimated CPA

The paraglider and S76 helicopter 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 converging then the S76 pilot was required to give way to the paraglider.⁴

Comments

BHPA

The BHPA is very disappointed to find that, once again, despite a paragliding school using the only tool available to them to help avoid an Airprox, the crew of a large helicopter thought it quite acceptable to fly through this NOTAM'd area of paragliding activity simply because they wanted to land at a location on the southern edge of the NOTAM'd area. Trying to visually acquire a low-flying paraglider or paragliders which are slow moving, notoriously difficult to spot against a background of countryside and carry no EC devices, is extremely difficult at the best of times. Furthermore, these particular paragliding pilots were day 1/2 ab-initios and incapable of performing any type of avoiding manoeuvre or dealing with a violent canopy collapse and would have been quite nervous seeing a large helicopter flying towards them.

Although a NOTAM is not an avoid, it is a warning and the BHPA does not consider that deliberately flying through a known NOTAM'd area of only 2NM radius shows particularly good airmanship when the helicopter pilot could have slightly amended their route to skirt around the edge of the NOTAM'd area. An even more thoughtful approach would have been to contact the NOTAM originator (the school's CFI) before departure to inform them of an approximate time of entry whereby the CFI could have ensured that all canopies were safely on the ground - as has happened before with other helicopter pilots landing at that same location. This was not a NOTAM for model aircraft flying or a tethered balloon or a building site crane but for paragliding activity which is very vulnerable to the downwash and turbulence generated by a large helicopter.

Summary

An Airprox was reported when a paraglider and an S76 helicopter flew into proximity approximately 5NM NE of Cockermonth at approximately 1327Z on Tuesday 3rd August 2021. Both pilots were operating under VFR in VMC; neither pilot was in receipt of an ATS.

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.

The Board first considered the actions of the paraglider pilot and was heartened to see that a NOTAM had been submitted to warn other airspace users of the presence of paragliding activity at this particular site. The Board heard from a paraglider pilot member that contact telephone numbers are usually included in the NOTAM submission – as was the case here – to enable other pilots intending to route via the airspace to contact the paraglider pilots. This not only provides better situational awareness for the transiting pilot(s), but also provides situational awareness to the paraglider pilots of other air activity so that they can plan their flying accordingly. The Board agreed that, in this particular case, the paraglider pilot had not had any situational awareness of the approaching S76 (**CF4**) because no call had been received beforehand. Members further agreed that, without any prior warning of the

³ (UK) SERA.3205 Proximity.

⁴ (UK) SERA.3210 Right-of-way (c)(2) Converging.

approaching helicopter, the paraglider pilot had been surprised by its presence and concerned by its proximity (**CF7**), electing to fly away from the likely location of the helicopter's downwash.

Turning to the actions of the S76 pilot, the Board heard from a helicopter pilot member that there are often NOTAMs warning of paraglider activity in this area. The member went on to say that there is also often a seasonal avoid to the east of the area of the NOTAM which may have influenced the S76 pilot's routing, but that also they may have been better served by calling the contact number provided in the NOTAM to inform the paragliders of their intended routing and timing. The Board agreed that, although there is no restriction on the use of the airspace encapsulated by the NOTAM, the S76 pilot's routing through the promulgated activity had been contributory to the Airprox (**CF1**). The Board also heard from a paraglider pilot member that predicting where paragliders will be operating is not straightforward. Wind direction is no indication of likely activity because paraglider pilots will operate on both the windward and leeward sides of a hill, depending on their intentions. The Board therefore agreed that the S76 pilot's plan regarding the likely flightpaths of the paragliders had not taken into account the variety of possibilities of where they might have expected to encounter paragliders (**CF2**) and that they had flown close enough to the paraglider to cause its pilot concern (**CF3, CF6**). Members agreed that the S76 pilot had only had generic situational awareness of the paraglider activity (**CF4**) and that this had not been enhanced by the TCAS II equipment on-board the S76 as the paraglider pilot had not been carrying any equipment that could have interacted with TCAS II (**CF5**).

Finally, the Board considered the risk involved in this event. Members noted that it had not been possible to measure the CPA because no positional data was available for the paraglider. That said, the Board took into account both pilots' assessment of the separation, and noted that the paraglider pilot's assessment of the risk of collision was 'low' and the S76 pilot's assessment of the risk had been 'none'. Although one member considered that this encounter had been risk-bearing, and another felt that normal safety standards and parameters had been met, the vast majority of members agreed that safety had been degraded but no risk of collision had existed. Accordingly, the Board assigned a Risk Category C to this event.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2021137			
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification
Flight Elements				
• Tactical Planning and Execution				
1	Human Factors	• Aircraft Navigation	An event involving navigation of the aircraft.	Flew through promulgated and active airspace, e.g. Glider Site
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 adaption
• Situational Awareness of the Conflicting Aircraft and Action				
3	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
4	Contextual	• Situational Awareness and Sensory Events	Events involving a flight crew's awareness and perception of situations	Pilot had no, late 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	• Lack of Individual Risk Perception	Events involving flight crew not fully appreciating the risk of a particular course of action	Pilot flew close enough to cause concern

7	Human Factors	<ul style="list-style-type: none"> Perception of Visual Information 	Events involving flight crew incorrectly perceiving a situation visually and then taking the wrong course of action or path of movement	Pilot was concerned by the proximity of the other aircraft
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Degree of Risk: C

Safety Barrier Assessment⁵

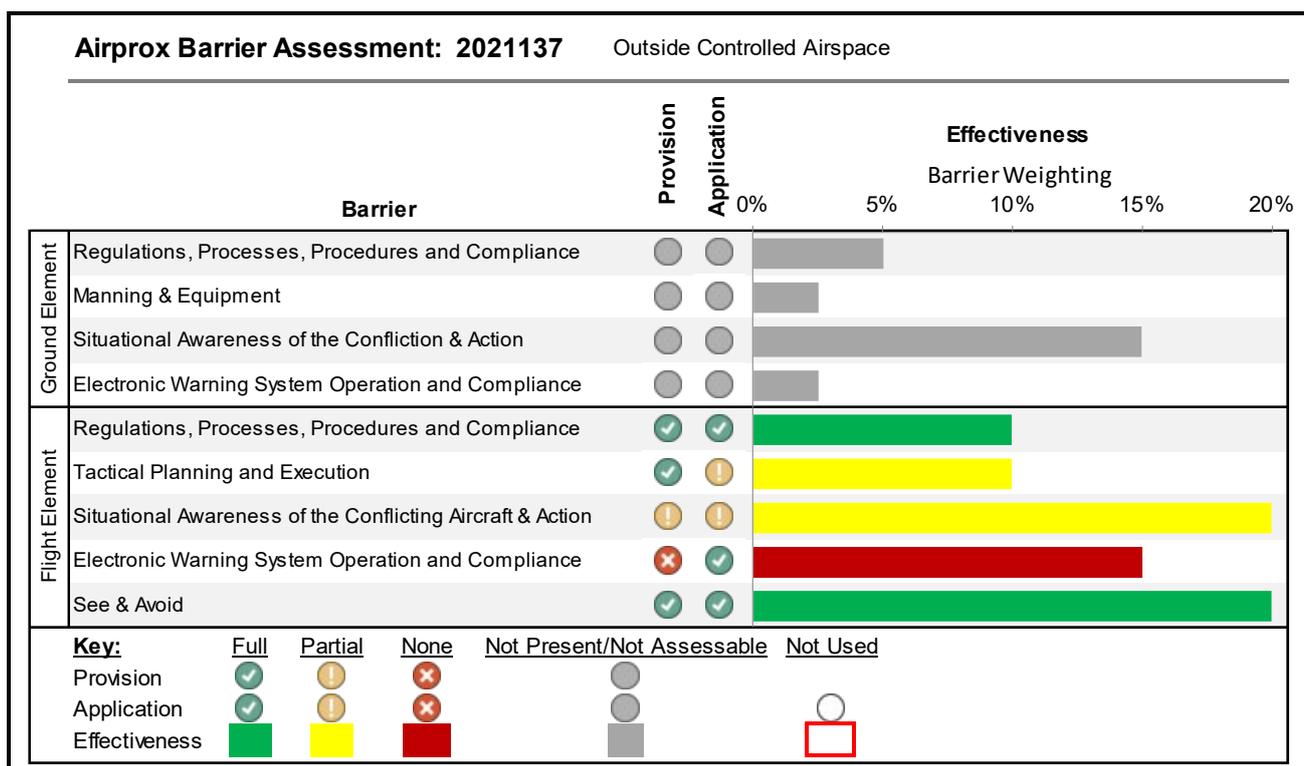
In assessing the effectiveness of the safety barriers associated with this incident, the Board concluded that the key factors had been that:

Flight Elements:

Tactical Planning and Execution was assessed as **partially effective** because the S76 pilot chose to route through the NOTAM'd paragliding activity (as they were entitled to) on the windward side of the hill, were it was more likely for them to have encountered paragliding activity.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **partially effective** because the paraglider pilot did not have any situational awareness of the approaching helicopter, and the S76 pilot only had generic situational awareness of paragliding activity within the NOTAM'd area.

Electronic Warning System Operation and Compliance were assessed as **ineffective** because the TCAS II equipment on the S76 could not detect the non-transponding paraglider.



⁵ The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).