

## **AIRPROX REPORT No 2014047**

Date/Time: 26 Mar 2014 1315Z

Position: 5441N 00302W  
(Carrock Fell)

Airspace: Lon FIR (Class: G)

Aircraft 1 Aircraft 2

Type: Sea King Paraglider

Operator: HQ Air (Trg) Unknown

Alt/FL: NK NK

Conditions: VMC VMC

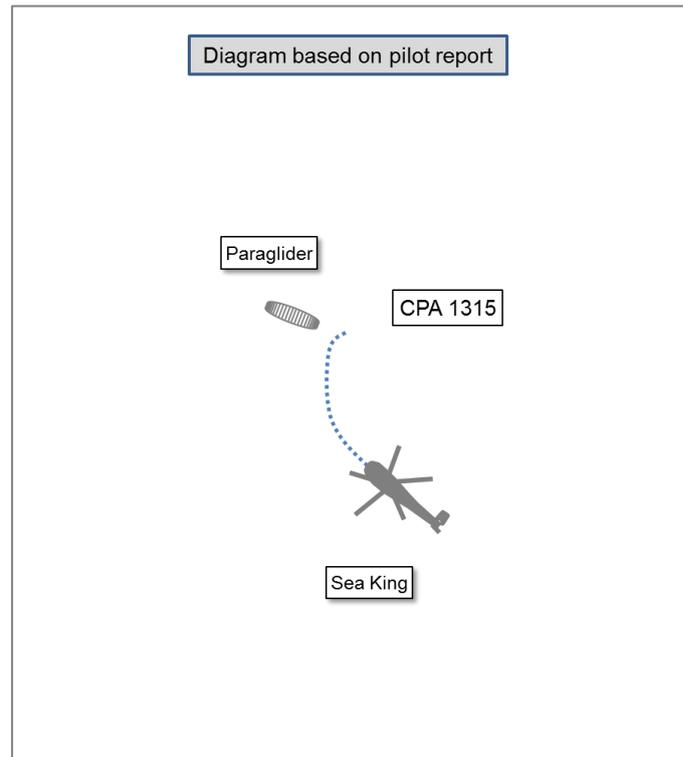
Visibility: 10km NK

Reported Separation:

50ft V/100m H NK

Recorded Separation:

NK



## **PART A: SUMMARY OF INFORMATION REPORTED TO UKAB**

**THE SEA KING PILOT** reports carrying out a Search and Rescue Operation (SAROP) near Carrock Fell in the Lake District. The yellow helicopter had navigation, landing and red strobe lights selected on, as was the SSR transponder with Modes A, C and S. The aircraft was not fitted with a TAS or ACAS. The pilot was operating under VFR, in VMC, 2500ft below cloud base, and was in receipt of a Basic Service from Carlisle APP, he recalled. On arrival at the incident scene, the winchman was deployed to the ground by winch. As the aircraft was transitioned away post deployment, in a right-hand turn through north, the RHS pilot saw a yellow paraglider canopy very close on the left, at a range of 100m, and 50ft above. The RHS pilot took control and broke down and right, away from the paraglider. The pilot stated that the paraglider pilot appeared to have launched from a ridge out of sight of the winching position, that the canopy was out of sight behind a buttress, and was only visually acquired when the top of the canopy became visible in a turn. He stated that the crew were aware of multiple aircraft in the area through CADS<sup>1</sup> and ATC, and had been flying defensively, acquiring appropriate ATC services and transmitting safety calls on low-level common to mitigate the risk. Despite these actions they still came very close to another aircraft. This incident occurred during the week which is traditionally seen as a quieter time for recreational flying, thus highlighting the need always to be alert for other aircraft.

He assessed the risk of collision as 'High'.

**THE PARAGLIDER PILOT:** Despite extensive tracing action the paraglider pilot could not be located.

### **Factual Background**

The weather at Blackpool and Prestwick was recorded as follows:

METAR EGNH 261320Z 31010KT 9999 SCT034 08/02 Q1020

METAR EGPK 261320Z 07004KT 020V110 9999 FEW040 11/01 Q1023

<sup>1</sup> Centralised Aviation Data Service, a military web based planning tool providing deconfliction advice against participating users.

## Analysis and Investigation

### CAA ATSI

The Sea King pilot was operating under VFR on a flight from RAF Boulmer and was in communication with Carlisle, operating an A/G Service only on 26 March 2014. ATSI had access to the report from the pilot of the Sea King, area radar recordings and recording of the Carlisle frequency. Carlisle provided some further background information.

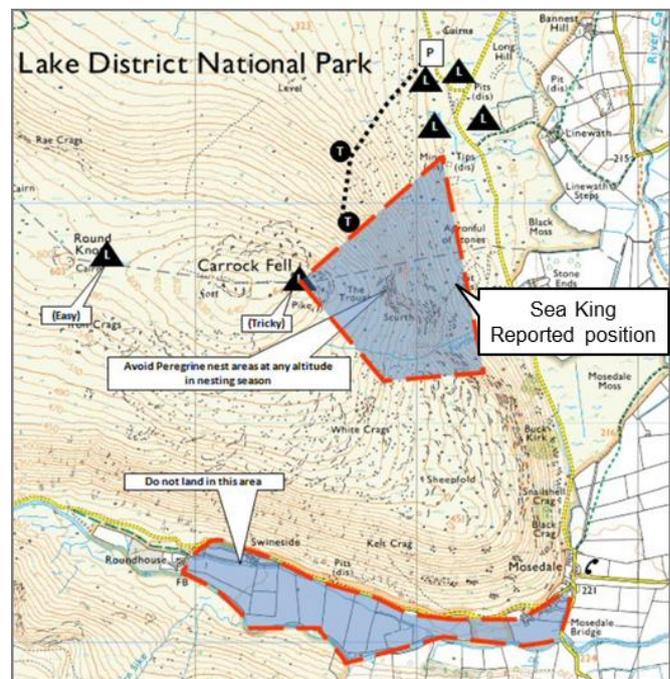
Area radar recordings show the Sea King in the area before the aircraft disappeared from radar coverage. The Sea King became visible on radar again at 1315:02 but there was no radar return from the paraglider so the geometry of the incident cannot be determined. Carlisle were only providing an A/G Service to the Sea King. Had the unit been aware of the paraglider they may have passed on the information to the Sea King but were under no obligation to do so.

Carlisle ATSU advised that paragliding regularly takes place in the Lake District but the unit is not necessarily given specific information on any given day. If information regarding individual activity is reported by pilots then the unit passes the information on to any traffic to which it might be relevant; however, there are various hills that individual paragliders may operate from. The crew of the Sea King did not report an Airprox to Carlisle ATSU.

### UKAB Secretariat

Both pilots shared an equal responsibility to avoid collision and not to fly into such proximity as to create a danger of collision<sup>2</sup>. Notwithstanding, under the Rules of the Air, the Sea King was required to give way to the paraglider<sup>3</sup>, which he did once he had sighted it. Another recent Airprox between a SAR helicopter and a hang-glider had previously also highlighted the susceptibility of ultralight aircraft to the effects of downwash generated by helicopters. Following consideration of the separation in that incident, the RAF Safety Centre recommended that, where practical, helicopter pilots should avoid hang-gliders, paragliders and other ultralight aircraft by 2000m laterally, and avoid flying over them. Notwithstanding, for this incident, the Sea King crew were conducting an SAR task, initially with a winchman on a cable, and were constrained in their choice of operating location. The Cumbria Soaring Club (CSC) provides details of paraglider launch sites usage in the Lake District, including Carrock Fell<sup>4</sup>. The map section at right shows details of the immediate area; take-off sites annotated with a 'T' in a black circle and landing sites with an 'L' in a black triangle.

Whilst it is possible that the paraglider pilot may have been carrying a hand-held radio, given the local terrain, distance from surrounding ATSUs and character of paragliding, it is considered highly unlikely that he would have been in receipt of an ATIS. In subsequent discussion with the Sea King pilot, he stated that he saw several paraglider pilots on the ridgeline above him and that his impression was that they were waiting for the Sea King to depart before themselves launching.



<sup>2</sup> Rules of the Air 2007 (as amended), Rule 8 (Avoiding aerial collisions) and as reflected in Military Flying Regulations.

<sup>3</sup> *ibid.*, Rule 9 (Converging).

<sup>4</sup> [http://www.cumbriasoaringclub.co.uk/SiteManagement/CSC\\_Specific\\_Site.php?site=CRF](http://www.cumbriasoaringclub.co.uk/SiteManagement/CSC_Specific_Site.php?site=CRF)

## Comments

### HQ Air Command

It is encouraging to note that the SAR crew had increased their situational awareness of other traffic (through CADS and ATC) likely to be encountered in the area of operations. Furthermore, the crew was clearly conscious of the possibility of encountering other traffic and prioritised lookout accordingly during the winching operation. Paragliders are extremely difficult to see at range so it is unsurprising that this was a late acquisition by the Sea King crew who carried out appropriate actions to maximise the separation once the paraglider had been visually acquired. It would normally be expected that the noise of the helicopter would be heard by the pilot of the paraglider at the reported separation of 100m; unfortunately it has proven impossible to trace the pilot of the paraglider to ascertain whether or not he was aware of the presence of the Sea King.

### BHPA

The inability to trace the paraglider pilot is regrettable, but with potential estimated distances greater than those estimated by the Sea King crew and the turning flight path the paraglider pilot might have assessed there to have been no risk, and ended up being blissfully unaware of any tracing action. With the weather present in the area at the time the paraglider pilot could well have launched from one of a number of sites miles from the location of the incident and flown to Carrock Fell as part of a cross-country flight. It is a common practice for hang gliders and paragliders to fly cross-country between sites and other working ridge systems in the Lake District and the other mountainous areas of the UK, exactly as gliders do. As far as is known both the Sea King and the paraglider were being operated normally in Class G airspace and therefore both had a duty to actively partake in see and avoid, with the Sea King pilot taking avoiding action to increase the miss distance. For a variety of reasons virtually no paraglider or hang glider pilots fly with an air-band radio. It would be extremely unusual for one to contact ATC for an ATSOCAS as the benefits to be had are deemed to be outweighed by the distraction factor, in the same way that few glider pilots will seek an ATSOCAS. A possibly useful analogy is to think about how much communication with ATC a powered pilot with an engine failure looks for, and then remember that soaring aircraft are in a permanent state of engine failure.

## Summary

An Airprox was reported when a Sea King and a paraglider flew into proximity in the vicinity of Carrock Fell at about 1315 on Wednesday 26<sup>th</sup> March 2014. Both pilots were operating under VFR, in VMC, the Sea King pilot in receipt of a Basic Service from Carlisle Radio and the paraglider pilot in all likelihood not in receipt of an ATS.

## **PART B: SUMMARY OF THE BOARD'S DISCUSSIONS**

Information available consisted of a report from the Sea King pilot, radar photographs/video recordings and reports from the appropriate ATC and operating authorities.

The Board first considered the likely actions of the paraglider pilot. Whilst he undoubtedly flew close enough to the Sea King to cause its RHS pilot to take control and manoeuvre away, in the absence of a narrative from the paraglider pilot it was not possible to appreciate his point of view. The Board noted that he may have been airborne before the Sea King arrived, and could have found himself sandwiched between the helicopter and Carrock Fell once it was at the scene of the incident. However, after some discussion, Board members decided that the paraglider pilot would most likely have heard the approaching Sea King from some distance, at which point he would have been best served by visually acquiring it and either landing or manoeuvring to increase separation and/or to aid visual acquisition by the Sea King pilot. Although both airspace users were equally entitled to operate in the Class G airspace at Carrock Fell, Board members expressed their strong opinion that all airspace users had a duty to make way for the self-evident priority of a SAROP; the appearance of

a big yellow Sea King was a valuable indication to other airspace users in that decision process. The Board also noted that the BHPA had quite sensibly been advocating that powered aircraft should avoid ultralights by a wide margin in order to minimise the risks of turbulence; they opined that this also applied in reverse, ultralights needed to avoid powered aircraft by a large margin if they could, for their own safety.

The Board then reflected that the Sea King crew was necessarily initially concentrating on the winching task and did not see the paraglider until about CPA as they transitioned away. The RHS pilot was sufficiently startled to take control and manoeuvre away from the paraglider, no doubt conscious of the potentially disastrous effect of the helicopter's downwash on the paraglider canopy. The Board noted the RAF Safety Centre advice that helicopter crews should avoid hang-gliders, paragliders and other ultralight aircraft by 2000m laterally, and emphasised that this advice indicated the power, persistence and danger that the downwash represented. With the high likelihood of SAR operations in hilly terrain, coupled with the advantageous paragliding conditions generated by the same terrain, the Board opined that a catalogue of paraglider launch sites, such as that produced by the Cumbria Soaring Club, would be a valuable resource when planning risk mitigation. The Board resolved to recommend that the BHPA consider producing a catalogue of paraglider launch sites, including usage under given wind conditions.

The Board decided that the cause of this Airprox was a conflict of flight paths, which had been resolved by the Sea King pilot. When assessing the risk of collision, the Board opined that in this case safety margins had been very much reduced below the norm.

### **PART C: ASSESSMENT OF CAUSE AND RISK**

<u>Cause:</u>	A conflict of flight paths resolved by the Sea King pilot.
<u>Degree of Risk:</u>	B
<u>ERC Score<sup>5</sup>:</u>	20
<u>Recommendation:</u>	The BHPA consider producing a catalogue of paraglider launch sites, including usage under given wind conditions.

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<sup>5</sup> Although the Event Risk Classification (ERC) trial had been formally terminated for future development at the time of the Board, for data continuity and consistency purposes, Director UKAB and the UKAB Secretariat provided a shadow assessment of ERC.