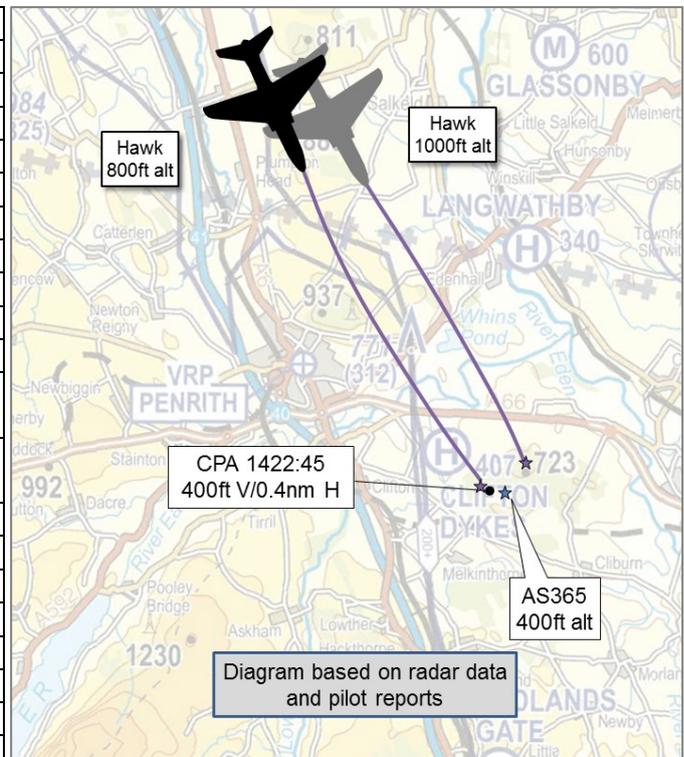


AIRPROX REPORT No 2018243

Date: 05 Sep 2018 Time: 1442Z Position: 5437N 00240W Location: Whinfall

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	AS365	Hawk x 2
Operator	HEMS	HQ Air (Ops)
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Listening Out	None ¹
Provider	Carlisle	Carlisle
Altitude/FL	400ft	800ft / 1000ft
Transponder	A, C, S	A, C, S
Reported		
Colours	White, Green, Yellow	Black
Lighting	Strobe, Nav, Landing	HISL, Nav
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	100ft	400ft
Altimeter	Rad Alt	RPS
Heading	360°	138°
Speed	40kt	420kt
ACAS/TAS	TCAS I	Not fitted
Alert	TA	N/A
Separation		
Reported	300ft V/400m H	400ft V/0.5nm H
Recorded	400ft V/0.4nm H	



THE AS365 PILOT reports that before they descended on task the pilot called Carlisle to inform them that the aircraft would be operating on a task at Whinfall (Center Parcs) and would be lifting sometime over the next 90 mins with poor communications due to terrain. Carlisle was asked to warn any military low-level traffic of the HEMS location if any called for a service. Upon lifting from the HEMS task, a look out was conducted and TCAS indicated an aircraft almost directly above and only separated by 300ft. A 1st Hawk was spotted in the 2 o'clock and passing right, moments later a 2nd Hawk was spotted in the 11 o'clock passing just above and to the left. They were unable to get TCAS separation details at this point because all eyes were out of the cockpit. He did not recall getting a TCAS indication on the 2nd Hawk and wondered if it was possible the 2nd aircraft had its transponder off. Initially this incident was considered to be a high risk of collision but, after talking to one of the Hawk pilots over the phone, he considered the risk medium due to a late sighting because of the terrain. He submitted this Airprox partly as a good news event as a few things had prevented this situation from being a lot worse, namely: the AS365 pilot giving Carlisle the location of the HEMS task because of the local knowledge of poor communications low-level and the normal north to south routing of military traffic; the Hawk pair speaking to Carlisle for traffic information even though they are not obliged as they were transiting in Class G airspace; and Carlisle warning the Hawk pair of the HEMS tasking location with a very good look out and spot of the Helimed. He believes that a low-level VHF common frequency would help prevent these types of Airprox in this area, especially in the central lakes and when Carlisle is closed. He also opined that GNAAS Ops (his operating authority) should consider accessing CADS to warn HEMS of potential conflicts.

He assessed the risk of collision as 'Medium'.

¹ Not under an Air Traffic Service, information call to Carlisle.

THE HAWK PILOT reports that they were conducting a pairs low-level sortie through LFAs 17 and 16. He requested Traffic Information from Carlisle Approach as the formation approached the Appleby Valley from the north. The position of the HEMS was given as north of his second IP at Center Parcs, near Penrith, and he was informed that the HEMS was on the ground. As the formation progressed towards the IP, he became visual with the AS365 on the ground/low hover in his 1:30 o'clock position at 2nm and assessed that the formation would pass either side. Nevertheless, he called the position of the AS365 to his wingman and both aircraft climbed to increase separation. He does not assess that there was a conflict between the Hawks and the AS365. At approximately 1700UTC, the captain of the AS365 called the squadron to inform him that he was submitting an Airprox report in accordance with company policy, as he had received a late TCAS alert against the Hawks whilst in the hover, due to terrain masking. Equally, he was unable to check CADS due to a lack of IT in his location, so he had not been aware of the Hawk formation's intended routing. During the planning process, the usual HEMS CADS warning centred around the Helo site NE of Penrith was present. The Hawks routing skirted the Western side of this warning and was briefed accordingly. Due to the persistence and often extended duration of this warning, squadron pilots have an increased vigilance for HEMS activity in this area.

He assessed the risk of collision as 'None'.

THE CARLISLE CONTROLLER reports that two Hawks called on frequency routing north to south requesting any traffic. Traffic Information was passed about a Helimed on the ground at Center Parcs in the Appleby Valley, saying it may lift at any time. The Hawks called going en-route after receiving the TI and did not request a service. Shortly after, the AS365 called lifting from the casualty site and Traffic Information was passed about the two Hawks. The pilot reported having already seen them on lifting and declared an Airprox that occurred at 1442z. The pilot of the AS365 stated he would be filing the Airprox report for the incident.

Factual Background

The weather at Carlisle was recorded as follows:

METAR EGNC 051450Z 29004KT 220V350 9999 FEW018 17/08 Q1021

Analysis and Investigation

UKAB Secretariat

The AS365 and Hawk pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard².

Comments

HQ Air Command

The Hawk crews had planned the mission in accordance with current procedures and had employed where possible all available barriers to MAC. The Hawk's route had been entered onto CADS, the crew had acknowledged the planned HEMS activity NE of Penrith (plotted on CADS as within 2nm radius of Langwathby HLS) and chosen a route to skirt the western side of this warning. However, the HEMS aircraft was operating outside of their stated location on CADS when the Airprox occurred, markedly reducing the effectiveness of this barrier. Moreover, the HEMS crew had been unable to check for conflicts on CADS due to a lack of IT.

Although not under a formal ATS, the Hawk pair had called Carlisle Approach to request TI and had been informed that the HEMS aircraft was on the ground at Centre Parcs. It is not possible to determine how far ahead of CPA this information was received. However, armed with this

² SERA.3205 Proximity. MAA RA 2307 paragraphs 1 and 2.

information, the Hawk lead was able to concentrate their lookout and, once visual with the HEMS aircraft, both Hawks took timely action to increase separation. The HEMS and Hawk crews and Carlisle controller are all commended for communicating effectively to increase overall SA and therefore separation.

ACAS is not fitted to the Hawk making this barrier unavailable to the Hawk crews; however, funding has been secured for future fitting. A TCAS TA was the first indication that the HEMS crew received alerting them to the presence of the Hawks. This was received later than would have been optimal due to the low-level nature of the tasking. A VHF common frequency might have helped to increase SA further, especially given the difficulty the HEMS crew had in accessing information on Carlisle Approach whilst at the landing site. The MOD is still working with the CAA on the future implementation of a VHF low-level common frequency.

Summary

An Airprox was reported when an AS365 and a pair of Hawks flew into proximity near Penrith at 1442hrs on Wednesday 5th September 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 the pilots of both aircraft, radar photographs/video recordings and reports from the air traffic controllers involved.

The Board began by looking at the actions of the AS365 pilot. The military member said that the HEMS site on CADS was not the one that the AS365 was operating at, but he went on to commend the AS365 pilot for informing Carlisle of his operating area which was then relayed to the Hawk formation. The Board members reiterated the value of using local ATC units to provide accurate SA to other pilots and agreed that the proactive call by the AS365 pilot had done much to resolve what might otherwise have been a far more serious incident. The Board noted the AS365 pilot's suggestion that his operating authority (GNAAS Ops) should access CADS to warn HEMS aircraft of emerging potential conflicts when they are operating away from base, and members hoped that they would be able to implement measures to progress this suggestion.

The Board then turned to the actions of the Hawk pilots. Noting that they were not required to contact Carlisle in the course of their task, the Board also commended them for doing so in recognition of the potential for encountering other aircraft in this busy airspace. As a result, they were aware of the location of the AS365, saw it early enough, and had climbed to ensure a measure of separation throughout their transit of the AS365's task area.

The Board then turned to the cause and risk of the Airprox and quickly agreed that all those involved had done the best they could in the circumstances. They therefore agreed that although the AS365 pilot was right to report the incident in reflection of his concerns and his desire to highlight the good practices of those concerned, this incident represented normal low-level operations and was best described as a sighting report. Turning to the risk, members agreed that there had been no risk of collision and that normal safety standards and procedures had pertained; risk category E.

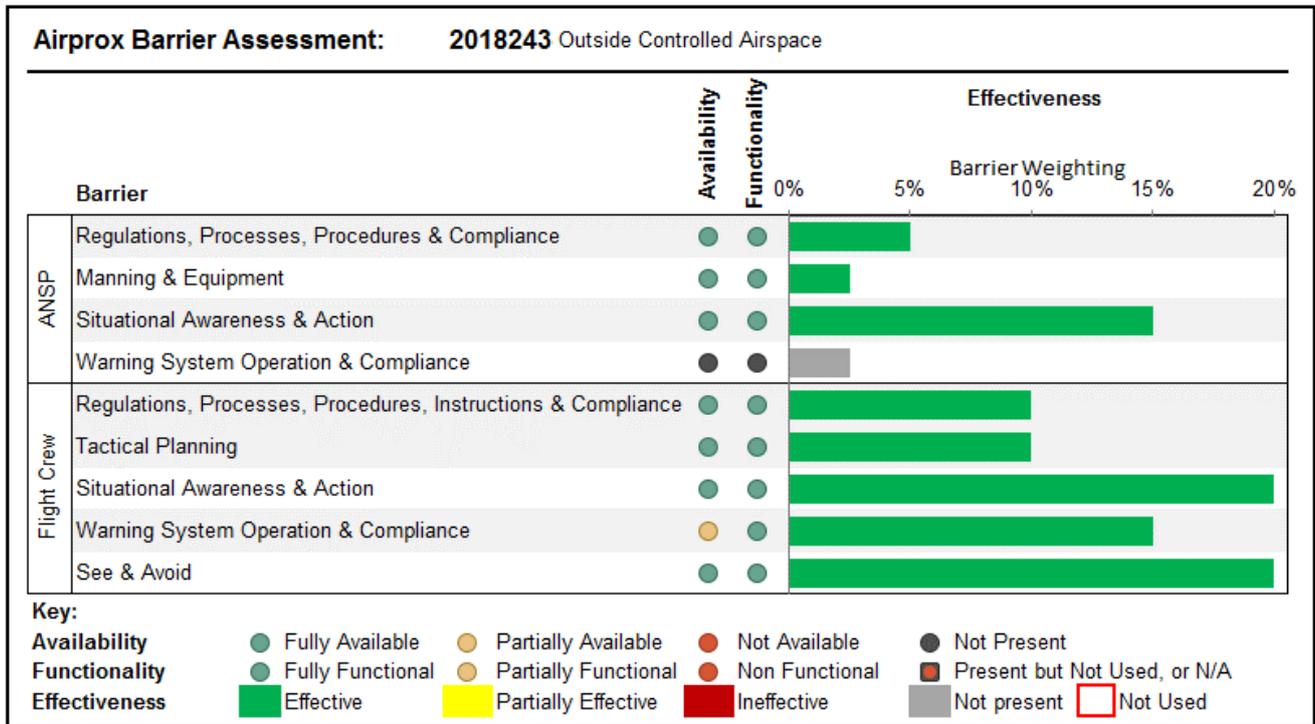
PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A sighting report.

Degree of Risk: E.

Safety Barrier Assessment³

In assessing the effectiveness of the safety barriers associated with this incident, the Board concluded that all the available barriers had worked effectively.



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