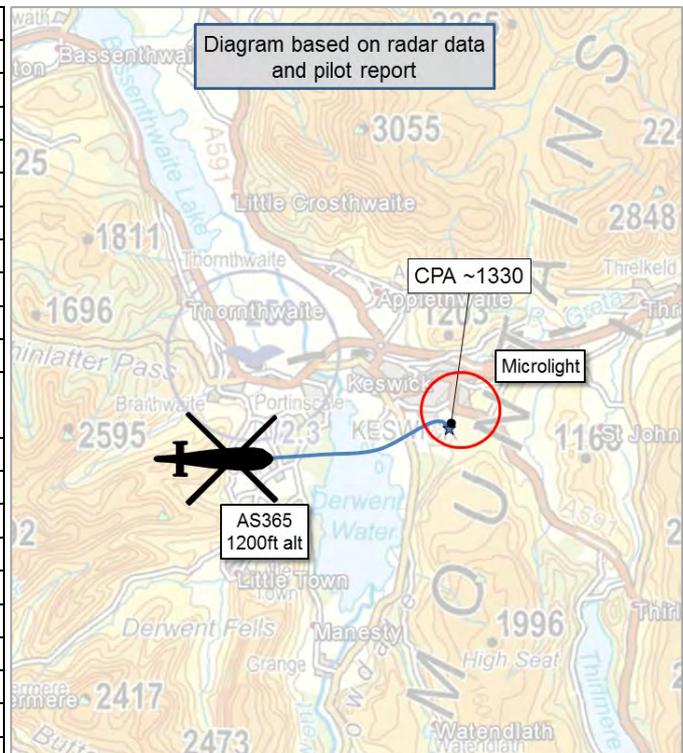


AIRPROX REPORT No 2018091

Date: 19 May 2018 Time: ~1330Z Position: 5435N 00307W Location: 0.5nm SE Keswick

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	AS365	Microlight
Operator	HEMS	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Listening Out	
Provider	London Info ¹	
Altitude/FL	1200ft	
Transponder	A, C, S	
Reported		
Colours	White, Green, Yellow	
Lighting	Nav, Strobe	
Conditions	VMC	
Visibility	>10km	
Altitude/FL	600ft	
Altimeter	QNH (1020hPa)	
Heading	050°	
Speed	130kt	
ACAS/TAS	TCAS I	
Alert	None	
Separation		
Reported	400ft V/0.5nm H	
Recorded	NK	



THE AS365 PILOT reports that he had descended below 1000ft agl near Keswick to avoid multiple gliders and para-gliders using the up-drafting slopes and that there had been no answer from Latrigg Fell launch site or gliders on 129.975 when he called on that frequency. He spotted the microlight late, above to the 12 o'clock and closing, and recalled making an avoiding left turn to maintain separation; there was no apparent avoiding action from the microlight. Another 5 (at least) microlights were then spotted routing east to west from the Penrith area to Keswick before there was any confliction. He thought that they may have been conducting a navigation event and opined that transponders on microlights would have aided identification and helped with TCAS warnings. Additionally, a Low-Level and/or open-air-space VHF common frequency for blind calls would have been helpful. He commented that London Info were very busy and could not have helped even if he could have got a call to them.

He assessed the risk of collision as 'Medium'.

THE MICROLIGHT PILOT could not be traced.

THE LONDON INFORMATION FISO reports that he was informed that the AS365 reported an Airprox with traffic to which he was providing a Basic Service [UKAB note: Upon investigation, the Microlight pilot was not receiving a service from London Information]. The AS365 was unknown traffic to him as the AS365 pilot was listening in on the frequency and was not in receipt of a service from London Info.

Factual Background

The local weather was not recorded.

¹ Also calling on 129.975 for gliders.

Analysis and Investigation

UKAB Secretariat

The AS365 and Microlight pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard². If the incident geometry is considered as head-on or nearly so, then both pilots were required to turn to the right³.

Occurrence Investigation

The radar replay shows the AS365 making a turn to the right (Figure 1) and, shortly after, a left turn back onto track. Due to the severity of the right turn, followed by a gentle return onto a north-easterly track, this is the likely location of CPA. There is an intermitted contact that briefly appears on the radar but this cannot be positively identified as the Microlight which the AS365 pilot reports. The other reported microlights in the vicinity also do not appear on the radar replay.

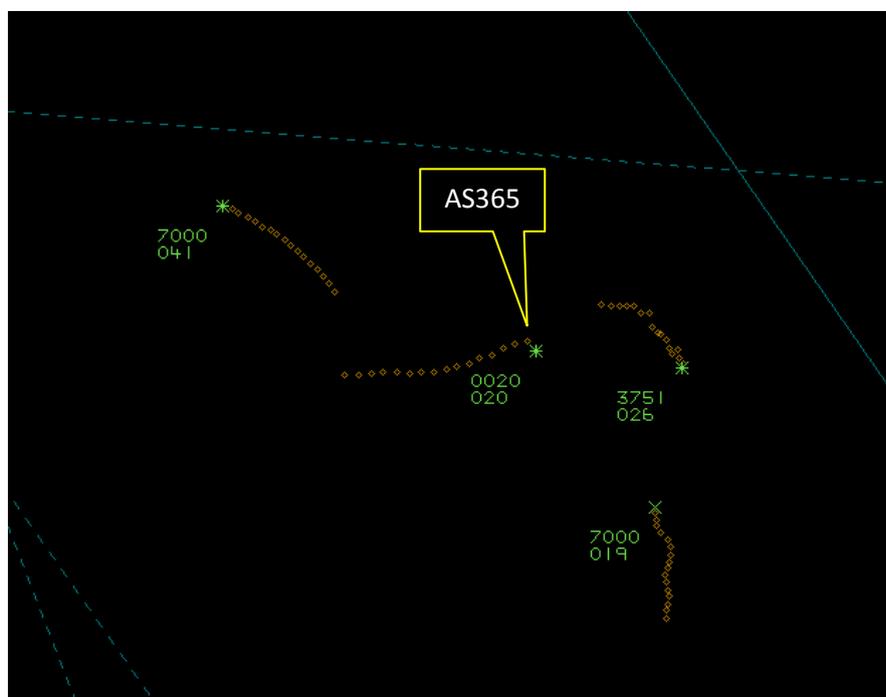


Figure 1: AS365 (Code 0020)

Summary

An Airprox was reported when an AS365 and a microlight flew into proximity near Keswick at about 1330hrs on Saturday 19th May 2018. Both pilots were operating under VFR in VMC, the AS365 pilot listening out on London Information. The microlight pilot could not be traced.

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 and reports from the air traffic controller involved.

The Board began by looking at the actions of the AS365 pilot. They agreed that he had been proactive in endeavouring to gain as much SA as possible through the use of the various frequencies and robust lookout, and members commented that the pilot did well to spot the microlight, albeit late, whilst keeping track of numerous other microlights, paragliders and gliders operating in the area. Although the Board agreed with the AS365 pilot that the fitting of transponders to microlights was a worthwhile idea,

² SERA.3205 Proximity.

³ SERA.3210 Right-of-way (c)(1) Approaching head-on.

members were mindful that this might not be practical at the present time due to cost and installation requirements. However, other collision warning aids were becoming increasingly affordable and they urged all pilots to review their capabilities and suitability for their class of aircraft. Similarly, members wondered whether the AS365 might also benefit from the installation of systems such as P-FLARM or PilotAware given that they might provide useful information on gliders and similar if they were a perceived regular threat. Although the microlights were not visible on the radar recording, members noted that the AS365 pilot was observed to make a definite turn, which appeared to be an avoiding action turn, before turning back onto the original course. Wondering whether the AS365 pilot could have changed his altitude to climb above the microlights and other soaring traffic, helicopter members opined that that would be dependent on the state of any casualty the AS365 pilot was transporting; the medical team could well have advised the pilot to maintain as low an altitude as possible during the transit to minimise the trauma risk to the patient.

The Board then looked at the actions of the microlight pilots. Some members opined that if the microlight pilots were part of a club and were conducting a navigation exercise then perhaps they could have submitted a CANP to advise other airspace users that they were operating in the area. However, it was noted that their activity could just as easily have been ad hoc, and it might not therefore have been practical to file a CANP. Nevertheless, the Board wished to highlight the availability of the CANP system for notifying appropriate activities, especially massed events, of which this appeared to be an example.

The Board then turned to the cause of the Airprox. Not knowing what the microlight pilot had seen or done, members agreed that, ultimately, the AS365 pilot had seen the microlight later than ideal and that, in the absence of other information, the cause was probably best described as a late sighting by the AS365 pilot. Turning to the risk they decided that the AS365 pilot had carried out a sufficiently early turn to avoid the microlight and therefore the risk was assessed as Category C; although safety had been degraded, there had been no risk of collision.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A late sighting by the AS365 pilot.

Degree of Risk: C.

Safety Barrier Assessment⁴

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

Flight Crew:

Situational Awareness and Action were assessed as **ineffective** because neither pilot had any SA on the other aircraft.

Warning System Operation and Compliance were assessed as **ineffective** because the microlight did not appear to have a transponder and therefore could not interact with the AS365's TCAS to alert the AS365 pilot to the presence of the microlight.

See and Avoid were assessed as **partially effective** because the AS365 pilot saw the microlight late and took appropriate avoiding action. It is not known if the microlight pilot saw the AS365.

⁴ The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).

