AIRPROX REPORT No 2015173

Date: 1 Oct 2015 Time: 1514Z Position: 5413N 00247W Location: Milnthorpe, Cumbria

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

| Recorded | Aircraft 1 | Aircraft 2 | 6 | A WINDF |
|-------------|------------------|---------------|--|--|
| Aircraft | AS365 | Hawk | Levens | Diagram based on radar data 🗂 |
| Operator | HEMS | HQ Air (Ops) | A STATE OF THE STA | and pilot reports |
| Airspace | London FIR | London FIR | CPA 1514:56 | |
| Class | G | G | 1100ft V/0.3nm H | |
| Rules | VFR | VFR | S CHEST SERVICE | 933 |
| Service | Basic | None | Heversham | Told Tigy |
| Provider | London | N/A | Limitatione | Lupton |
| | Information | | | Control of the second s |
| Altitude/FL | 1600ft | 500ft | Storth | 869 Kearstwick |
| Transponder | A,C | A,C,S | Beethan | 819 |
| Reported | | | Holme | A (300) |
| Colours | White, Yellow, | Black | | 899 Biggins |
| | Green | | Yealand Yealand | Burton-in- |
| Lighting | NK | Strobes, Nav, | Redmayne | Kendal |
| | | landing. | AS365 | |
| Conditions | VMC | VMC | 1500ft alt | 7. 93 Newton |
| Visibility | 25km | 30km | - FOR MEV | Priest |
| Altitude/FL | 1500ft | 250ft | 535 | Hawk 250ft msd |
| Altimeter | RPS (1032hPa) | agl | arton Borwi | 250it frisd |
| Heading | 010° | 300° | ands | |
| Speed | 150kt | 420kt | CARNFORTH | Capernwray 486 Melling Wennin |
| ACAS/TAS | TCAS I | Not fitted | Over | ellet |
| Alert | Information | N/A | | Gressingham |
| Separation | | | | |
| Reported | 400ft V/0m H | NK | | |
| Recorded | 1100ft V/0.3nm H | | | |

THE AS365 PILOT reports he was on a return transit to his base from Blackpool Hospital. He started the transit at 2000ft to clear R444, but this put him in a haze layer so, once clear of R444, he elected to descend to 1500ft for the rest of the transit. He was coasting-in over Morecombe Bay, had been cleared from Blackpool Approach, and was in the process of calling London Information when he noticed a fast-moving TCAS icon on his display in the 3 o'clock position and closing. The call to London Information was cut short while the crew tried to identify the aircraft. With no visual ID, the pilot elected to climb to ensure separation. During the climb the Hawk was spotted in the 9 o'clock position, moving away towards the Windermere low-level route. The Hawk was not seen until after it had passed under the aircraft, and the pilot opined that separation only came from his decision to climb to avoid the TCAS indication. The call was then completed to London Information, the Airprox was not reported then but, on landing, and after consultation with another pilot, he decided to report the incident. He noted that a low-level common frequency, like the one being trialled in Scotland, may have prevented this incident from occurring.

He assessed the risk of collision as 'High'.

THE HAWK PILOT reports he was conducting a low-level sortie in accordance with his Squadron's SOPs, the weather was good and he flew he trip as planned. He was listening out on the UHF low-level common frequency and making the appropriate information calls. As he transited northbound, maintaining low-level, he was unaware of any helimed but, as he approached the southern Lake District, he heard a message on Guard, declaring SAROPS ON. He was unable to write down the co-ordinates in time but understood that it was in the Lake District with a top height of 5000ft. He therefore climbed to 5000ft [UKAB note: this was after the Airprox] but continued on the planned track

and timeline. Once clear of the Lake District he descended back to low-level. When subsequently transiting past Carlisle he contacted Carlisle ATC who had the [SAROPS] helimed aircraft on frequency and the two pilots agreed deconfliction action with the helimed maintaining 3000ft and the Hawk low-level. [UKAB Note: this was not the same helimed aircraft that was involved in the Airprox some time before]. The sortie was completed without further incident, it was only later that he was informed about the Airprox. He noted that had his aircraft been fitted with TCAS, he may have had more situational awareness about the [Airprox] helimed and the incident may have been averted.

He assessed the risk of collision as 'Low'.

Factual Background

The weather at Warton was recorded as follows:

METAR EGNO 011450Z VRB01KT CAVOK 19/09 Q1032=

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 hazard¹. If the incident geometry is considered as converging then the AS365 pilot was required to give way to the Hawk².

Comments

HQ Air Command

The Hawk pilot planned and flew his route in accordance with extant regulations. Further investigation has revealed that, although not directly associated with either of the Airprox aircraft, the SAROPS message transmitted on Guard is likely to have occurred at around the time these 2 aircraft flew into proximity. It is plausible that the Hawk pilot's lookout may have been compromised by his efforts to copy down the coordinates of the SAROPS area and thus he never saw the helicopter. However, the AS365 was equipped with TCAS I which alerted its pilot to the presence of a fast-moving aircraft and he elected to climb to increase separation. It is encouraging to note that the AS365 pilot is aware of the low-level VHF common frequency trial north of Latitude N56.00° and considers that a similar facility across the UK would be beneficial; the RAF Safety Centre is working in conjunction with the CAA to assess the wider applicability of a common VHF low-level frequency on completion of the Scotland trial, due to end on 31 August 2016. Furthermore, the MOD now has a funded programme to fit CWS to Hawk TMk1 aircraft, which should mitigate against this type of encounter in the future.

Summary

An Airprox was reported when an AS365 and a Hawk flew into proximity at 1514 on Thursday, 1st October 2015. 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 the pilots of both aircraft, radar photographs/video recordings, and reports from the appropriate operating authorities.

D&D had confirmed to the UKAB Secretariat that the SAROPS call had been made at about 1515z, around the time of the Airprox. Therefore the Board thought it likely that, as suggested by HQ Air

¹ SERA.3205 Proximity.

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

Command, the Hawk pilot was probably distracted by trying to listen to the SAROPS message and write down the co-ordinates at the time the 2 aircraft crossed tracks; this more than likely meant that his look-out was degraded, which probably explained why he didn't see the AS365. For his part, the AS365 pilot suddenly saw the Hawk approaching rapidly on his TCAS, and was concerned because he couldn't see the aircraft. The Board thought it likely that the Hawk had climbed to get over the high ground to the east of the Airprox location before descending thereafter to maintain 250ft agl; it was highly likely that first TCAS indication would have been when the Hawk unmasked in this climb so the AS365 pilot was led to believe that the Hawk flying closer in height than it subsequently was following its descent to maintain low-level after the high ground. In reality, radar replays show that there was 1100ft between the two aircraft when they crossed, which led the Board to assess this as a TCAS sighting report.

Nevertheless, the Board stressed that the AS365 pilot had been correct to file a report, and members thanked him for doing so. Although the event was in reality relatively benign, it highlighted a number of flight safety issues. Namely: the dangers of becoming distracted in the cockpit to the detriment of look-out; and a reminder that TCAS is mechanised for relatively non-dynamic IFR operations and requires careful interpretation in dynamic VFR conditions. Notwithstanding the fact that neither pilot saw each other before CPA, given that in this instance there was 1100ft separation between the two aircraft, the Board assessed the risk as Category E, normal safety standards had pertained.

PART C: ASSESSMENT OF CAUSE AND RISK

<u>Cause</u>: A TCAS sighting report.

Degree of Risk: E.