AIRPROX REPORT No 2013111 Diagram based on pilot report Date/Time: 14 Aug 2013 1400Z Position: 5147N 00045W (1nm SW RAF Halton) Vigilant Airspace: Lon FIR (Class: G) 800ft alt Reporting Ac Reported Ac Vigilant T1 Type: Light Aircraft Operator. HQ Air (Trg) Unknown CPA 1400 NK Alt/FL: 800ft QFE (1012hPa) NK **RAF Halton** VMC NK Weather. NK Visibility: 30km Reported Separation: 100ft V/0m H NK Recorded Separation: Unknown LightAircraft NK

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE VIGILANT PILOT reports operating in the visual circuit at RAF Halton. The white and 'dayglo' orange aircraft had navigation and landing lights selected on, as were the HISLs and the SSR transponder with Mode A. The aircraft was not fitted with Mode C, an ACAS or a TAS. The pilot was operating under VFR in VMC with an A/G service from Halton Radio. The aircraft was levelled at 800ft in the circuit and, whilst continuing the lookout scan prior to turning onto the downwind leg, a '2-seat' aircraft was spotted directly above at approximately 900ft. The pilot noted that the sighting was such that avoiding action would not have been effective. An RT call was made to notify all other circuit traffic. By the time the downwind turn was completed, the other aircraft had 'exited northerly towards Aylesbury', clear of the circuit. The pilot stated that the other aircraft's pilot made no evasive action and appeared oblivious to the 3 aircraft in the circuit and the airfield'.

She assessed the risk of collision as 'High'.

THE LIGHT AIRCRAFT: The incident aircraft tracks did not appear on any of the area radar recordings. The light aircraft pilot could not be traced.

Factual Background

The weather at Luton was recorded as follows:

METAR EGGW 141350Z 20008KT 140V250 9999 BKN038 21/11 Q1022 METAR EGGW 141420Z 22008KT 180V250 9999 BKN040 21/11 Q1022

Analysis and Investigation

UKAB Secretariat

Both pilots were equally responsible for collision avoidance¹, and the light aircraft pilot was required to either conform to the pattern of traffic intending to land at the airfield or keep clear of

¹ Rules of the Air 2007 (as amended), Rule 8 (Avoiding aerial collisions).

the airspace in which the pattern was formed². Assuming an accurate position and vertical separation at CPA, as reported by the Vigilant pilot, it was considered likely that the light aircraft was inside the RAF Halton ATZ and its pilot was therefore required to conform with the relevant elements of Rule 45 of the Rules of the Air 2007 (as amended) as quoted below:

(5) If there is no flight information service unit at the aerodrome the commander shall obtain information from the air/ground communication service to enable the flight to be conducted safely within the zone.

(6) The commander of an aircraft flying within the aerodrome traffic zone of an aerodrome shall -

(a) cause a continuous watch to be maintained on the appropriate radio frequency notified for communications at the aerodrome; or

(b) if this is not possible, cause a watch to be kept for such instructions as may be issued by visual means; and

(c) if the aircraft is fitted with means of communication by radio with the ground, communicate his position and height to the air traffic control unit, the flight information service unit or the air/ground communication service at the aerodrome (as the case may be) on entering the zone and immediately prior to leaving it.'

Comments

HQ Air Command

Whilst there are occasions when the wind conditions and the performance limitations of the Vigilant conspire to push circuit traffic to and beyond the limits of the ATZ, on the face of it, this appears to be a case of an ATZ infringement. Such incidents are routinely reported to the CAA and no other action is practicable. Crews must always be aware of the potential for ATZ infringements and be pedantic in their lookout, particularly towards the edge of the ATZ.

Summary

A Vigilant T1 and an unidentified light aircraft flew into confliction in the vicinity of the visual circuit at RAF Halton at about 1400 on 14 August 2013. The Vigilant pilot was operating under VFR in VMC with an A/G service from RAF Halton and did not see the light aircraft in time to take avoiding action. No RT transmissions from the light aircraft pilot were heard on the RAF Halton A/G frequency. The light aircraft was reported as passing directly overhead the Vigilant with 100ft vertical separation.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included a report from the Vigilant pilot and radar video recordings, although it was not possible to detect the subject light aircraft on these recordings.

The Board first considered the Vigilant pilot's actions. Given the aircraft's performance, the Board considered that the Vigilant pilot was inside the Halton ATZ at CPA. The weather conditions and geometry were such that, assuming it passed directly overhead the Vigilant, the light aircraft could have been seen at range (albeit it was on a constant bearing from the Vigilant pilot until a very late stage, and the Vigilant pilot may have been preoccupied with after take-off handling and circuit procedures). What was clear was that the Vigilant pilot did not see the conflicting traffic until it was too late to take avoiding action: the Board considered that this served as a useful reminder to all pilots of the need for effective look-out even when within the 'protected' environment of an ATZ.

² Rules of the Air 2007 (as amended), Rule 12 (Flight in the vicinity of an aerodrome).

Turning to the untraced light aircraft's pilot, the Board considered that he or she had flown through the Halton ATZ, and that they ought reasonably to have known that the airfield and its ATZ were there. This therefore suggested a concerning lack of awareness and/or planning on the part of the pilot. Unfortunately, the Board could not establish whether the light aircraft pilot was simply uncertain of position and unaware of the Vigilant, or was visual with the Vigilant and had taken avoiding action (or had decided that none was required).

Assessing the cause and risk, the Board opined that an ATZ is established to provide a degree of protection for circuit traffic and that the cause of the Airprox had been that the light aircraft pilot flew through the Halton ATZ, without notifying the A/G operator, and into conflict with the Vigilant. Late sightings are often associated with an underestimate of range, however, even if the separation had been of the order of a few hundred feet, the Board felt that, in the circumstances, safety margins had been much reduced below the normal.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause:The Light Aircraft pilot flew through the Halton ATZ, without notifying the A/G
operator, and into conflict with the Vigilant in the Halton visual circuit.Degree of Risk:B.

ERC Score³: 100

³ 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.