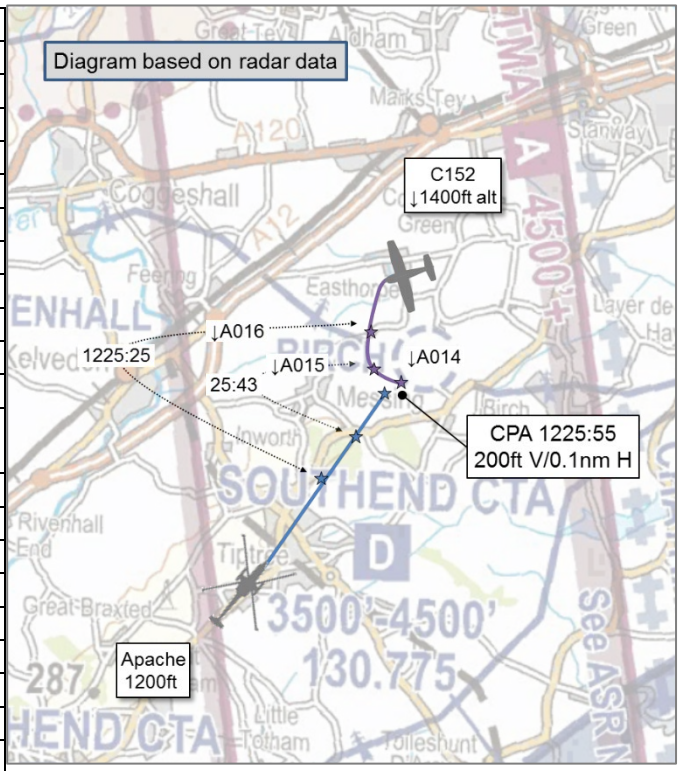
AIRPROX REPORT No 2018283

Date: 26 Sep 2018 Time: 1225Z Position: 5150N 00046E Location: 5nm SE Earls Colne

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Apache	C152
Operator	HQ JHC	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Basic	Basic
Provider	Wattisham	Southend
Altitude/FL	1200ft	1400ft
Transponder	A, C, S	A, C, S
Reported		
Colours	Green	White, Blue
Lighting	Strobes, Nav, Landing	
Conditions	VMC	VMC
Visibility	40km	
Altitude/FL	1250ft	1500ft
Altimeter	QNH (1032hPa)	amsl
Heading	020°	NK
Speed	NR	NK
ACAS/TAS	Not fitted	Not fitted
Separation		
Reported	NR V/150m H	NK
Recorded	200ft V/0.1nm H	



THE APACHE PILOT reports that he was at 1250ft on the QNH (1032 hPa) and returning to Wattisham, with a Basic Service from Wattisham App. The App controller asked him to confirm his level and then passed Traffic Information on traffic 12 o'clock at close range. Both crew members looked out and immediately spotted a fixed-wing aircraft about 500m away, the Capt instructed the handling pilot to break left away from the contact. As they passed they observed the other aircraft turn away in a tight left-hand orbit. The Fire Control Radar (FCR) was scanning in air-surveillance mode but had not picked up the other aircraft.

He assessed the risk of collision as 'Medium'.

THE C152 PILOT reports that he wasn't informed of the Airprox until some months after the event so, although he remembers the incident, some of his recollection was incomplete. However, he was able to look at his flight records, log book and SkyDemon to help to complete the report. He was on a training flight with a student on refresher training. They were receiving a Basic Service from Southend at the time and were VMC, although he couldn't recall the specific weather conditions. They had completed a number of stalls and, on completion of this part of the lesson, the aircraft was positioned essentially over Birch disused airfield at 2500ft with the intention of using the long SW rectangular field as a 'target field' for PFL practice. The aircraft was positioned at 2500ft in a 'deadside' position to 'land' in the designated field on a SW, into-wind heading. He normally conducts a lookout before reducing engine power to idle, although given the time since the event, he cannot be certain the look-out was conducted, but the manoeuvre would not have been commenced if another aircraft had been sighted. It was possible, given the relative positions of the two aircraft later, that the helicopter at the lower altitude was obscured by the nose of the C152. During the left turn, with the student as the handling pilot, the instructor heard a radio call from the Southend controller indicating another aircraft in the vicinity. He took control, restored engine power and rolled wings level. Once wings-level he could see a military helicopter below and slightly to the right. From the SkyDemon trace he could see that the PFL was

aborted at 1400-1500ft, but he did not recall taking any other specific avoiding action, and the aircraft was climbed back to 2500ft amsl to reposition for a further PFL. He could not recall the height difference between the two aircraft, although the positions were closer than would have occurred if the helicopter had been seen in normal flight, and he did not think that there was a danger of collision, because the C152 was above the helicopter even though it was crossing its path. The call from Southend resulted in the termination of the descent and was helpful in ensuring visual contact was made. He opined that when teaching the PFL technique the manoeuvre is conducted with left turns to maximise the student's view of the field for 'landing'. The left turns would have reduced visibility in the direction of the helicopter, and it was also possible that the additional time spent looking at the field to the left, coaching the student through the approach, also reduced the lookout. He now makes a conscious effort when teaching the manoeuvre to ensure lookout with wings level away from the field prior to any turns.

He assessed the risk of collision as 'None'.

THE WATTISHAM DSATCO reports that they were not informed about the Airprox until informed by the UKAB secretariat one month later, no mention was made on the RT at the time, therefore the controller had no recollection of the incident.

[UKAB note: the Airprox was not reported until 22nd October 2018]

THE SOUTHEND CONTROLLER reports that he had no recollection of the Airprox, there was no indication on frequency that an Airprox would be filed.

Factual Background

The weather at Wattisham was recorded as follows:

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METAR EGUW 261150Z 25011KT 9999 FEW024 19/06 Q1032 BLU NOSIG=
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Analysis and Investigation

UKAB Secretariat

The Apache and C152 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard[1]. If the incident geometry is considered as converging then the C152 pilot was required to give way to the Apache[2].

Comments

JHC

This Airprox is interesting in the fact that it is the second Airprox within as many weeks in the vicinity of the same disused airfield with a squawking GA Aircraft who were both flying similar profiles to the disused airfield. This highlights several issues of a recurring theme. Although the Apache was on a Basic Service the controller has given TI which has immediately cued the aircrew onto the traffic. It is fortunate that the controller went above and beyond what is required because in this case the GA aircraft did not see the Apache and the FCR also did not pick up the fixed-wing traffic. It is unknown if the Apache was also listening out on the Southend Frequency on another radio whilst transiting under the CTA. If so, then this may have been useful for SA because the fixed-wing traffic was receiving a service from that agency. It was disappointing to learn that Wattisham ATC had not heard about the Airprox until being approached by the UKAB secretariat. This does highlight an apparent void in AHF investigation processes as one would expect liaison with ATC to be seen as a key activity in any investigation. It is also noteworthy that this is at least the 3rd time that the FCR has failed to pick up traffic.

[1] SERA.3205 Proximity. MAA RA 2307 paragraphs 1 and 2.
[2] SERA.3210 Right-of-way (c)(2) Converging. MAA RA 2307 paragraph 12.

Summary

An Airprox was reported when an Apache and a C152 flew into proximity near Birch disused airfield at 1225hrs on Wednesday 26th September 2018. Both pilots were operating under VFR in VMC, the Apache pilot in receipt of a Basic Service from Wattisham and the C152 pilot in receipt of a Basic Service from Southend whilst conducting PFL training.

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, reports from the air traffic controllers involved and reports from the Apache operating authority.

The Board first looked at the actions of the Apache pilot and noted that he was receiving a Basic Service from Wattisham. Members thought he may have been better served requesting a Traffic Service for his transit in that area in order to provide a measure of certainty in gaining Traffic Information. As it was, in this instance ATC did give him Traffic Information, but it relied upon the controller keeping ident on the aircraft, which is not required under a Basic Service, then assessing that there would be a definite risk of collision[3]; in contrast, under a Traffic Service controllers were obliged to maintain a continuous watch (subject to workload), and aim to pass information on relevant traffic before the conflicting aircraft is within 5nm, in order to give the pilot sufficient time to meet his collision avoidance responsibilities. The Board also discussed whether the Apache pilot would have been able to call Southend on another radio as he transited close to their airspace, or indeed whether he would have been better placed by seeking a service on Southend's frequency anyway given that they were the designated LARS unit for that area. Although with the benefit of hindsight, in this incident Southend knew about the C152 and even just listening out on their frequency may had provided the Apache pilot with some situational awareness about it.

The Board noted that there had been other Airprox incidents between Apaches and GA aircraft using Birch for PFLs and the Board thought that the Apache Helicopter Force should take note of this for planning and briefing purposes. With this in mind, some members thought that the Apache pilot would have been better served by choosing a different height for his transit in that area; 1000-2000ft is a common height range for GA aircraft and, by choosing to fly within this height band, the Apache pilot was increasing his chances of encountering GA aircraft. In debating the topic of gaining local knowledge of such potential hot-spots, the Board discussed the merits of Regional Airspace Working Groups as forums for mutual understanding of local airspace issues, and were told that the closest one was held at Marham. Because this was some distance from Wattisham and the GA community likely to operate around the Wattisham area, the Board commended to Wattisham the merits of hosting their own such an event. Finally, the Board noted that by not reporting the incident on the RT at the time, and by delaying the DASOR notification by a month, vital evidence had been lost from both the C152 pilot and the controllers. The Board urged the Wattisham Safety Cell to highlight to the Apache Force the requirement for timely incident notification in order to aid the investigation process.

Turning to the actions of the C152 pilot, some members felt that, although it wouldn't have made any difference on this occasion because Southend gave Traffic Information, he too could have opted for a Traffic Service, and specifically asking for a height band to operate between whilst he was conducting PFLs. Other members opined that whilst instructing it was sometimes difficult to also listen out to ATC, but they acknowledged that a Traffic Service might have provided an extra level of protection against the distractions that instructing posed. GA members commented about the C152 pilot's use of Birch disused airfield for PFL training, and wondered whether the increased Southend airspace may have pushed more GA into the Stansted/Southend gap. Notwithstanding, members noted that Southend had given Traffic Information, the C152 instructor saw the Apache, and although he did not give an estimate of the distance separating them, he was content with the separation.

[3] CAP 774 states: '*Given that the provider of a Basic Service is not required to monitor the flight, pilots should not expect any form of traffic information from a controller/FISO. A pilot who considers that he requires a regular flow of specific traffic information shall request a Traffic Service'.*

The Board briefly looked at the role that ATC had to play and noted that, in both cases, the controllers could not remember the incident due to the time elapsed between the event and the reporting of it. However, it was evident that both pilots had reported receiving Traffic Information despite being only on a Basic Service. Given that there was no requirement for them to monitor the flights, the Board commended both controllers for their actions, which undoubtedly cued the pilots to look for the traffic.

In determining the cause of the Airprox, the Board quickly agreed that this had been a late sighting by both pilots. However, the assessment of risk caused some debate, with some members believing that the radar separation of 200ft and 0.1nm mean that safety had been much reduced below the norm (Category B). Others felt that although safety had been reduced, both pilots had been able to take timely and effective action such that there had been no risk of collision (Category C). In the end, the latter view prevailed and the risk of collision was assessed as Category C.

Noting that the Apache FCR didn't alert him to the traffic, and that this had been the case in other Apache Airprox, the Board wondered how reliable the FCR was for collision avoidance. In contrast, members noted that the C152 was squawking and a TAS would likely have picked up this information. The Board wished to highlight to the Apache Helicopter Force the fact that, in their opinion, relying on the FCR alone as a barrier against MAC was not a reliable mitigation of the threat and that other barriers should be employed to supplement it (such as a Traffic Service).

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A late sighting by both pilots.

Degree of Risk: C.

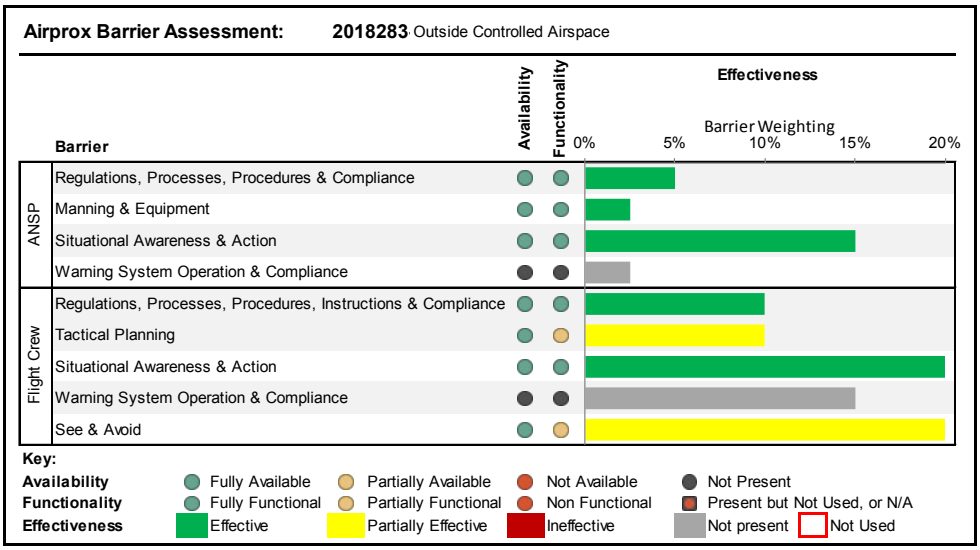
Safety Barrier Assessment[4]

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

Flight Crew:

Tactical Planning was assessed as **partially effective** because the Apache crew and the C152 pilot could have opted for a Traffic Service. The Apache crew could also have transited outside the commonly used 1000-2000ft GA height band.

See and Avoid were assessed as **partially effective** because it was a late sighting by both pilots.



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