# **AIRPROX REPORT No 2016013**

Date: 04 Feb 2016 Time: 1318Z Position: 5203N 00104W Location: Turweston

# PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2	Tomidon
Aircraft	Chinook	Bulldog	Surgerian FRRV
Operator	HQ JHC	Civ Pte	Syresham EGBV
Airspace	London FIR	London FIR	Bulldog 121.075
Class	G	G	Crowfield NMC
Rules	VFR	VFR	
Service	Basic	AGCS	2
Provider	London Information	Turweston	Bid lesd CPA 1318:51 NK V/0.1nm H
Altitude/FL	FL012	NK	NK V/0.1nm H
Transponder	A, C	A, C	
Reported			438/ Na Dai
Colours	Green	Red, White	
Lighting	Strobes, Nav, Landing.	Strobes	EGBT
Conditions	VMC	VMC	100 175
Visibility	30km	>10km	
Altitude/FL	1000ft	500ft	Chinook
Altimeter	QNH (1023hPa)	QFE	1000ft alt
Heading	030°	270°	
Speed	130kt	75kt	Diagram based on radar data
ACAS/TAS	Not fitted	Not fitted	and pilot reports
Separation		·	
Reported	200ftV/200m H	100ftV/500m H	
Recorded	NK V/0.1nm H		

**THE CHINOOK PILOT** reports that whilst in transit at 1000ft in a gentle climb, the handling pilot noticed a light fixed-wing aircraft on a reciprocal heading. It was approximately 100ft higher and 0.5nm away. The handling pilot took action by descending and turning away but it appeared that the other aircraft did not take any action. At the closest point, the two aircraft were 200ft and 200m from each other, and the pilot thought that had he not taken avoiding action the two aircraft would have collided.

He assessed the risk of collision as 'High'.

**THE BULLDOG PILOT** reports that he was in the circuit at Turweston, on final approach to land, and was thus concentrating on maintaining the correct approach path and angle. He fleetingly saw a Chinook pass below and to the left. He did not judge there to be a risk of collision so he did not take any avoiding action. He opined that pilots should transit past civil airfields outside the active circuit patterns, even when they do not have formal control zones.

He assessed the risk of collision as 'Low'.

**THE LONDON INFORMATION FISO** reports that he was providing a Basic Service to the Chinook pilot who was operating in the Silverstone area. At approximately 1320, the Chinook pilot reported that he had taken avoiding action against a fixed-wing aircraft 200ft above him, and that he wanted to report it as an Airprox.

## **Factual Background**

The weather at Oxford was recorded as follows:

EGTK 041320Z 28015KT 9999 SCT022 13/09 Q1024=

# **Analysis and Investigation**

#### **CAA ATSI**

The Chinook (SSR code 1177) was operating on a VFR flight in Class G airspace and was in receipt of a Basic Service from London Flight Information. At the time of the Airprox, the Chinook was 1.2nm east of Turweston Aerodrome tracking north-eastbound towards Silverstone motor-racing circuit. A Basic Service relies on the pilot avoiding other traffic, unaided by controllers/FISOs. The provider of a Basic Service is not required to monitor the flight (and) pilots should not expect any form of Traffic Information from a controller/FISO¹.

The Bulldog was in the visual circuit at Turwestern, turning finals to land, and was transponding the VFR conspicuity code 7000. At the time of the Airprox the Bulldog was in receipt of an Air Ground Communication Service (AGCS) from Turweston Radio.

'Air Ground Communications Service (AGCS) is a service provided to pilots at specific UK at aerodromes. However, it is not viewed by the UK as an Air Traffic Service because it does not include an alerting service as part of its content'.<sup>2</sup>

'AGCS radio station operators provide traffic and weather information to pilots operating on and in the vicinity of the aerodrome. Such traffic information is based primarily on reports made by other pilots. Information provided by an AGCS radio station operator may be used to assist a pilot in making a decision; however, the safe conduct of the flight remains the pilot's responsibility'.<sup>3</sup>

The Bulldog could not be positively identified on the radar recording, but a contact believed to be the Bulldog, manoeuvred in a manner consistent with both pilots' reports.

CPA occurred between 1318:48 (Figure 1) and 1318:50 (Figure 2) with a horizontal distance of less than 0.1nm; it was not possible to calculate the vertical distance due to the contact believed to be the Bulldog not displaying SSR Mode C information.

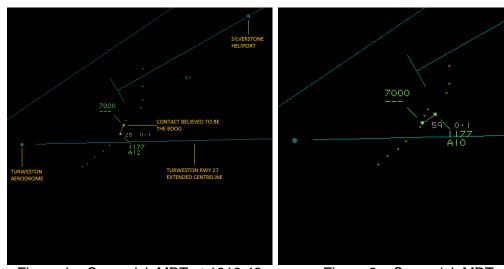


Figure 1 – Swanwick MRT at 1318:48

Figure 2 – Swanwick MRT at 1318:50

<sup>&</sup>lt;sup>1</sup> CAP774, Chapter 2, Para 2.1 & 2.5

<sup>&</sup>lt;sup>2</sup> CAP452 Ch. 4 page 1 para 1.1

<sup>&</sup>lt;sup>3</sup> CAP452 Ch. 4 page 1 para 1.2

Turweston Aerodrome does not have a promulgated Aerodrome Traffic Zone after the aerodrome authority voluntarily surrendered their Aerodrome Licence to the CAA, who, subsequently exercised its powers in accordance with Article 228 of the Air Navigation Order 2009, by revoking said Aerodrome Licence on the 12<sup>th</sup> August 2015. Turweston's Aerodrome Traffic Zone was subsequently disestablished and the aerodrome's UK AIP entry removed.

#### **UKAB Secretariat**

The Chinook and Bulldog pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard<sup>4</sup>. An aircraft operated on or in the vicinity of an aerodrome shall conform with or avoid the pattern of traffic formed by other aircraft in operation<sup>5</sup>.

# Occurrence Investigation

RAF Odiham conducted a Unit investigation into the incident in which they noted that Turweston had ceased to become a licensed aerodrome and so its ATZ had been removed from the Military VFR low-flying charts. The charts now only depicted Turweston as a minor aerodrome with less than 6 movements a day; the Chinook crew would not have unreasonably expected this level of activity when they planned their routing. Figure 3 shows the routing planned by the Chinook crew.

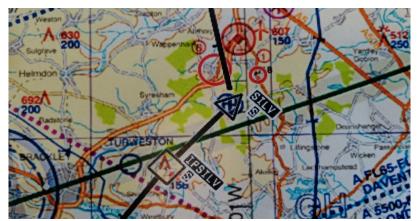


Figure 3 – The Chinook's planned routeing.

However, the investigation noted that although it was no longer a licensed airfield with an ATZ, Turweston was in fact a busy training airfield with up to 80 movements a day. On CAA charts there is the facility to place a circle with a T inside denoting training airfields without ATZ. The Military Low flying Operations Squadron (LFOS) are therefore investigating how to better represent busier airfields without ATZ on military VFR charts; as part of this activity they are currently undertaking an audit of all minor aerodromes to ensure that the information displayed is accurate.

## Comments

#### JHC

Both aircraft were operating VFR in Class G airspace. The lack of ATZ marking on the chart removes important information for aircraft operating in the vicinity of this airfield and the current chart does not accurately represent the number of movements. Had the ATZ remained on the chart, it would have provided valuable situational awareness to the Chinook crew, and they would have displaced themselves further laterally. This Airprox has driven an audit of the Low Flying Charts for all Minor Aerodromes. Additionally, the forthcoming embodiment of TAS on the Chinook fleet will provide further mitigation to the MAC risk in the future.

<sup>&</sup>lt;sup>4</sup> SERA.3205 Proximity.

<sup>&</sup>lt;sup>5</sup> SERA.3225 Operation on and in the Vicinity of an Aerodrome.

## **Summary**

An Airprox was reported when a Chinook and a Bulldog flew into proximity at 1318 on Thursday 4<sup>th</sup> February 2016 near Turweston airfield. Both pilots were operating under VFR in VMC, the Chinook pilot in receipt of a Basic Service from London Flight Information and the Bulldog pilot in receipt of an Air-to-Ground Service from Turweston.

## PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from the pilots of both aircraft, transcripts of the relevant RT frequencies, radar photographs/video recordings, reports from the FISO involved and reports from the appropriate ATC and operating authorities.

The Board started their discussions by looking at the charts and the reason for the removal of the ATZ at Turweston. They were informed by the CAA Airspace member that as a result of the CAA red-tape challenge, where it was agreed to remove some of the regulation of small airfields, Turweston had made the decision not to renew its CAA licence. As part of this strategy, a licensed aerodrome with an ATZ need only be served by a "means of two-way radio communication" (AGCS) to support the ATZ, whereas an unlicensed aerodrome with an ATZ requires the support of an ATC or AFIS unit<sup>6</sup>. Consequently, the change to unlicensed status for Turweston would have required them to provide an ATC or AFIS if they wished to keep the ATZ; their decision to provide only an AGCS meant that the ATZ around Turweston had to be removed. The Board noted that on civil charts there was the facility for placing a T with a circle around it for busy training airfields, but it was believed that it was incumbent on the airfield operators to ensure this happened. The Military Low-Flying member (whose organisation has responsibility for Military charts) noted that in fact, when the investigation started, Turweston did not have the T on the civil chart either, and was not listed in the AIP as a training airfield. The Military were now looking at ways to incorporate better the status of minor airfields onto their own mapping, and were attempting to validate the information currently held by them for all minor aerodromes. Board members opined that it was very much incumbent on airfield operators to ensure that the information in the public domain was up-to-date and accurate; the Board were informed that since this Airprox, Turweston had promulgated a NOTAM highlighting airspace users of its activity, but members noted that a NOTAM can only remain in place for 90 days, so the AIP entry and chart depiction needed to be hastened as a more permanent solution.

The Board then turned to the actions of the Chinook pilot and noted that he had planned to route approx. 1 mile east of Turweston. Most flying members agreed that this would be considered a sufficient margin from a minor aerodrome, albeit there remained a need to look out for any traffic that might be using the airfield nonetheless. Had the Chinook pilot known that Turweston was a busy training airfield, flying members opined that he may well have been more cued to look for circuit traffic but, because it wasn't marked on his charts as such, there was no reason for him to be aware of this. Some members wondered why he hadn't called Turweston on their frequency, which is clearly shown on the CAA charts (see the chart on page 1), but members were informed that the military charts don't show such frequencies (see the Chinook pilot's chart at figure 3), and that this was deliberate in an effort to keep charts clear of unnecessary clutter. Furthermore, many members felt that because he was intending to route overhead Silverston, the pilot was more likely to want to call them anyway. Finally, some members noted that the Chinook pilot was using a mast to the east of Turwestern as a routing point, and wondered whether he had become fixated on seeing that to the detriment of his look-out. Nevertheless, members agreed that, even having spotted the Bulldog late, the Chinook pilot had been able to take timely and effective avoiding action to increase the separation between the two aircraft.

For his part, the Board noted that the Bulldog pilot didn't see the Chinook pilot until it was on his left and much lower; they concluded therefore that he probably hadn't seen it until CPA, or even after. Notwithstanding, they thought that this was completely understandable given that he would have been concentrating on his approach to the runway and would not have expected to meet traffic at that

<sup>&</sup>lt;sup>6</sup> CAA Policy Statement; Establishment and Dimensions of Aerodrome Traffic Zones (ATZ) dated 17 Feb 2016

point. However, the Board opined that this served as a reminder to pilots operating at aerodromes without an ATZ that they must at all times remain vigilant for traffic that may come from any direction.

In determining the cause of the Airprox, the Board agreed that the crux of this incident had been a late sighting by the Chinook pilot and effectively a non-sighting by the Bulldog pilot. Notwithstanding, they also considered that there was a contributory factor in that the military VFR chart symbology did not indicate the actual degree of activity at Turweston. The risk was assessed as Category C, timely and effective avoiding action had been taken by the Chinook pilot.

# PART C: ASSESSMENT OF CAUSE AND RISK

<u>Cause</u>: A late sighting by the Chinook pilot and effectively a non-sighting by the

Bulldog pilot in the vicinity of Turweston Airfield.

Contributory Factor(s): The military VFR chart symbology did not indicate the actual degree of

activity at Turweston.

Degree of Risk: C.