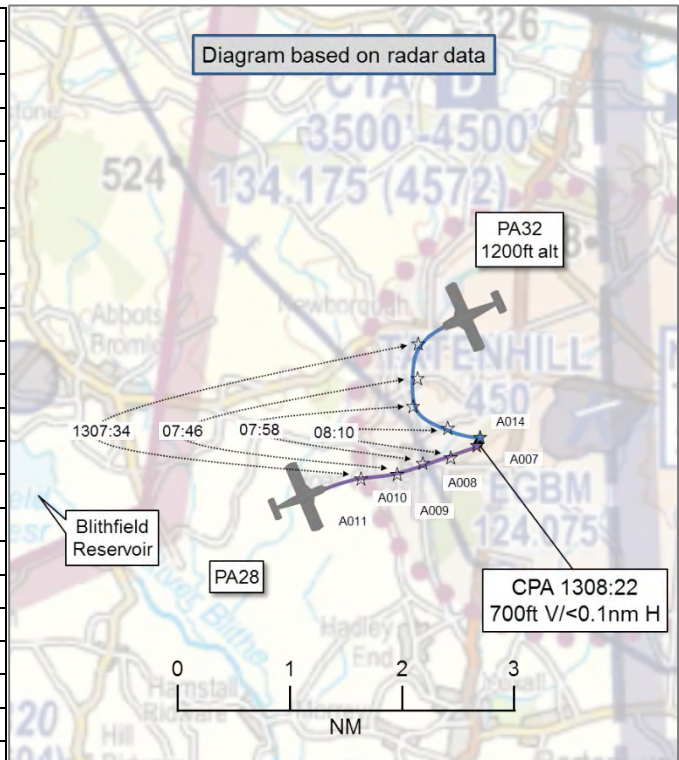


**AIRPROX REPORT No 2018092**

Date: 20 May 2018 Time: 1308Z Position: 5249N 00147W Location: Tatenhill airfield - elev 450ft

**PART A: SUMMARY OF INFORMATION REPORTED TO UKAB**

Recorded	Aircraft 1	Aircraft 2
Aircraft	PA32	PA28
Operator	Civ FW	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	AGCS	AGCS
Provider	Tatenhill	Tatenhill
Altitude/FL	1400ft	700ft
Transponder	A, C, S	A, C, S
<b>Reported</b>		
Colours	White, blue, red	White, red
Lighting	Nav	NK
Conditions	VMC	VMC
Visibility	>15nm	>10km
Altitude/FL	700ft	900ft
Altimeter	QFE (1006hPa)	QNH (NK hPa)
Heading	170°	030°
Speed	90kt	90kt
ACAS/TAS	TAS	TAS
Alert	None	None
<b>Separation</b>		
Reported	100ft V/0.1nm H	~500ft V/~500m H
Recorded	700ft V/0.1nm H	



**THE PA32 PILOT** reports that he was visiting Tatenhill, accompanied by another pilot. He noted that there was very good visibility, a clear horizon and no cloud. The PA32 pilot heard and saw a PA28 ahead, reduced speed and sequenced behind him to follow him for a deadside join to left-hand downwind for RW08. Standard R/T calls were made and spacing appeared appropriate, with the PA28 ahead turning on to base as he established on downwind. He saw the PA28 turn from base to final and moments later made the downwind-to-base turn himself. He recalled that just as he rolled out on the base leg, another pilot called that he was making a straight-in approach to land on RW08, coming from 'the reservoir' on long finals, and that he had the aircraft that had just turned finals in sight ahead. The A/G controller just acknowledged 'roger', giving no other aircraft information. The PA32 pilot did not recall hearing a call from the other pilot before that point, but his accompanying pilot recalled hearing the other pilot call Tatenhill for the first time saying that he was at the reservoir for re-join and then a second call a short while later announcing that he was making a straight in approach from the reservoir on long-finals with the aircraft on final ahead in sight. The PA32 pilot immediately called that he was on left-base, No 2 to the aircraft on final. He asked the accompanying pilot to look out for the other aircraft, anticipating that he might turn final with the other aircraft behind him. As he was reaching the point to turn onto finals, at around 700ft on QFE [1150ft altitude/QNH], the accompanying pilot called out that she had the straight in traffic in sight and that it was very close, to the right. The PA32 pilot saw the other aircraft in around the 1 to 1.30 position, about half a mile away and probably around 100ft below. It was clearly a low-wing aircraft, it looked like a PA28, getting bigger on a constant aspect in the right window. The PA32 pilot immediately applied full power, pulled the nose up to climb, and started a turn to the left. He saw the PA28 disappear underneath him.

The PA32 pilot stated that he believed a serious incident was avoided by the accompanying pilot seeing the other aircraft and calling it to him with urgency so that he could take avoiding action. He had been assuming, based on the reservoir call, that the other aircraft was further from the airfield as he started to turn onto final and stated that there was a very high likelihood the two aircraft would have collided,

had the accompanying pilot not been in his aircraft. He noted that the PA28 pilot must have made his first call on the radio when he was already close to the airfield and that it was made far too late to join straight-in on long finals with aircraft in the circuit. He felt that the prime cause of the Airprox was the other pilot making a straight in approach and cutting into a busy circuit, without awareness of the PA32's presence, despite all the R/T calls. In his opinion, the PA28 pilot's late announcing of his intentions suggested that he may not have been listening in before being very close to the airfield. The PA32 pilot also believed that the 'air traffic controller' was not providing the level of service to be expected of a competent A/G controller, and that he did not have adequate situational awareness of what was going on in his circuit. The PA32 pilot stated that this was the first time in 30 years of flying that he had felt it necessary to report an Airprox.

He assessed the risk of collision as 'High'.

**THE PA28 PILOT** reports that he positioned on long-final from the reservoir and was visual with traffic on left base and on final approach. He made the necessary R/T calls and on short final another aircraft turned on to left base. The pilot noted that his TAS did not alert and that by the time he saw the other aircraft he was down to 'approx short final' and visual with the landed traffic.

He assessed the risk of collision as 'Low'.

**THE A/G OPERATOR** did not provide a narrative of events.

## Factual Background

The weather at East Midlands Airport was recorded as follows:

METAR EGNX 201320Z 10008KT 070V140 CAVOK 21/09 Q1021=

## Analysis and Investigation

### UKAB Secretariat

The PA32 and PA28 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>1</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>2</sup>. An aircraft in flight, or operating on the ground or water, shall give way to aircraft landing or in the final stages of an approach to land<sup>3</sup>. When two or more heavier-than-air aircraft are approaching an aerodrome or an operating site for the purpose of landing, aircraft at the higher level shall give way to aircraft at the lower level, but the latter shall not take advantage of this rule to cut in front of another which is in the final stages of an approach to land, or to overtake that aircraft<sup>3</sup>.

## Summary

An Airprox was reported when a PA32 and a PA28 flew into proximity at Tatenhill airfield at 1308hrs on Sunday 20<sup>th</sup> May 2018. Both pilots were operating under VFR in VMC, both in receipt of an AGCS from Tatenhill Radio.

<sup>1</sup> SERA.3205 Proximity.

<sup>2</sup> SERA.3225 Operation on and in the Vicinity of an Aerodrome.

<sup>3</sup> SERA.3210 Right-of-way, Landing.

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

Information available consisted of reports from both pilots and radar photographs/video recordings.

Members first discussed the relevant regulations and their applicability to this Airprox situation. On the one hand, the PA28 pilot was required to conform with the pattern of traffic already established in the visual circuit, one of which was the PA32. On the other, the PA32 pilot was required to give way to traffic 'in the final stages of an approach to land', the PA28 being on a straight-in approach. After some discussion, the Board reached the conclusion that priority hinged on the position of the finals call, in that the aircraft calling finals first had priority. Members agreed that simply declaring a straight-in approach did not afford any degree of priority over traffic already established in the visual circuit. However, it was key to operations in a visual circuit that the finals call was made in the appropriate position, which for conventional GA aircraft was at about 1nm from the threshold, normally rolling out from the base-to-final turn. Clearly, priority of approach was not based on a race to that position, but on pilots' appreciation of who would reasonably reach that position first with due allowance given in order to integrate effectively. As ever, communication and consideration were key to effective and safe operation; the Skyway Code states:

As a general rule, joining traffic must always give way to traffic already established in the circuit<sup>4</sup>.

In this case, the Board agreed that the position of the traffic was such that it was for the PA28 pilot to give way to the PA32 and, as such, the cause of the Airprox was that the PA28 pilot did not integrate with the PA32 in the visual circuit. Members also pointed out that had the PA28 been closer, i.e. likely to reach the finals position first, it would have been for the PA32 pilot to give way to it. In the event, both pilots had sufficient awareness of the position of the other that there had not been a risk of collision.

Members also commented on the PA32 pilot's assessment of the A/G Operator, noting that he was not an air traffic controller and was not required to maintain situational awareness of the position of aircraft in the visual circuit. CAP452 (Aeronautical Radio Station Operator's Guide) states:

'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>5</sup>.'

CAP413 (Radiotelephony Manual) states:

An AGCS radio station operator is not necessarily able to view any part of the aerodrome or surrounding airspace. Traffic information provided by an AGCS radio station operator is therefore based primarily on reports made by other pilots<sup>6</sup>.

In the course of the discussion, members also noted that the Tatenhill AIP entry for Flight Procedures stated only that:

Circuit directions joining overhead: Runways 08 and 26 -LH.

Members felt that more specific information could usefully be given to improve safety as aircraft joined the visual circuit; for example, specific reference to a preferred joining procedure. The implication from the AIP entry was that the circuit should be joined only from the overhead but this was clearly not the case given that both pilots had joined differently to this. The Board therefore resolved to recommend that 'Tatenhill update their AIP entry to remove ambiguity from the join procedure'.

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<sup>4</sup> CAP1535S, The Skyway Code, Aerodrome Operations, Arrival and departure procedures, General circuit guidance, page 92.

<sup>5</sup> Chapter 4 (Air ground communication service), Introduction.

<sup>6</sup> Chapter 4(Aerodrome Phraseology), Aerodrome Air/Ground Communication Service Phraseology, paragraph 4.149.

**PART C: ASSESSMENT OF CAUSE AND RISK**

Cause: The PA28 pilot did not integrate with the PA32 in the visual circuit.

Degree of Risk: C.

Recommendations: Tatenhill update their AIP entry to remove ambiguity from the join procedure.

Safety Barrier Assessment<sup>7</sup>

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

**ANSP:**

**Situational Awareness and Action** were assessed as **not used** because an AGCS is not required to provide deconfliction in the visual circuit.

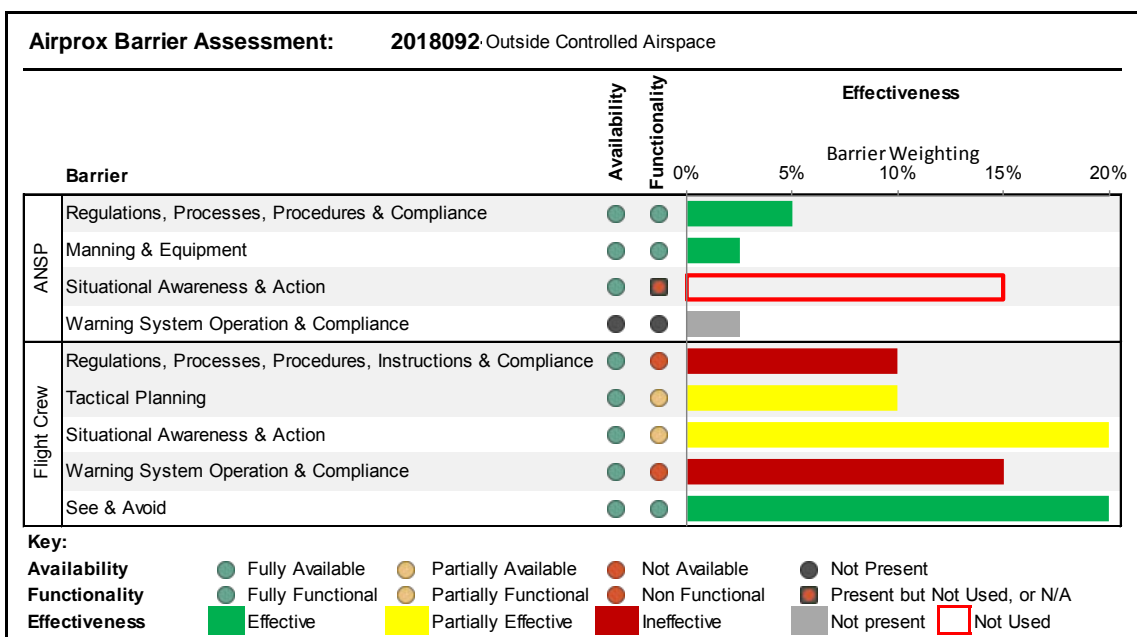
**Flight Crew:**

**Regulations, Processes, Procedures, Instructions and Compliance** were assessed as **ineffective** because the PA28 pilot did not integrate with the pattern of traffic intending to land.

**Tactical Planning** was assessed as **partially effective** because the PA28 pilot did not adequately modify his plan to join straight-in once he was visual with the PA32.

**Situational Awareness and Action** were assessed as **partially effective** because although the PA32 pilot was aware of the approaching PA28 he was unsure of its range, and the PA28 pilot was aware of the PA32 in the circuit but did not act on that information.

**Warning System Operation and Compliance** were assessed as **ineffective** because neither aircrafts' TAS alerted when it would reasonably be expected that they would do so.



<sup>7</sup> The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).