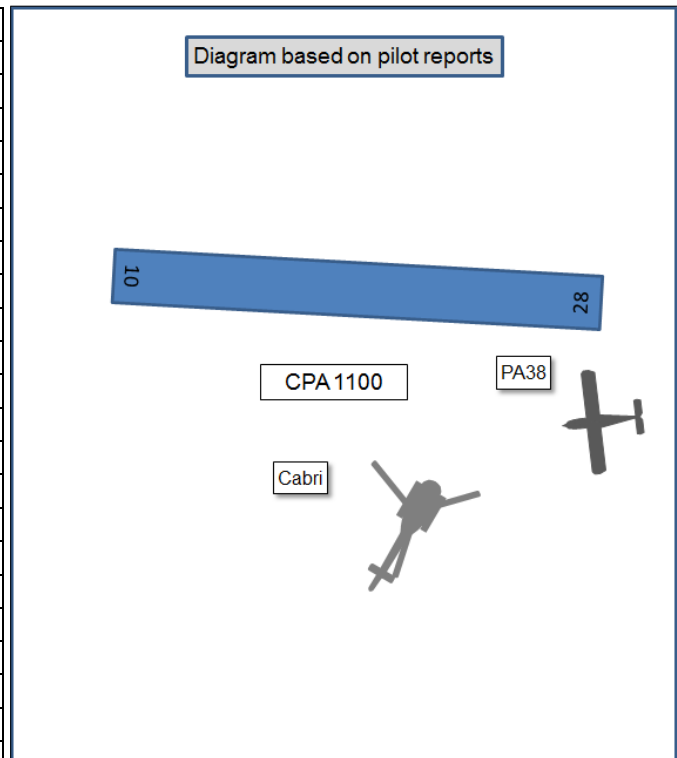


AIRPROX REPORT No 2016068

Date: 30 Apr 2016 Time: 1100Z Position: 5236N 00101W Location: Leicester

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Cabri G2	PA38
Operator	Civ Trg	Civ Pte
Airspace	Leicester ATZ	Leicester ATZ
Class	G	G
Rules	VFR	VFR
Service	AGCS	AGCS
Provider	Leicester	Leicester
Altitude/FL	NK	NK
Transponder	A,C	A (C not fitted)
Reported		
Colours	Grey	White, Orange
Lighting	Strobe, Landing	Strobes, Nav
Conditions	VMC	VMC
Visibility	NK	>10km
Altitude/FL	700ft	1000ft
Altimeter	QFE (1002hPa)	QFE
Heading	010°	
Speed	70kt	90kt
ACAS/TAS	Not fitted	Not fitted
Separation		
Reported	<100ft V/0m H	Not seen
Recorded	N/K	



THE CABRI PILOT reports that he was conducting an instructional flight in the RW28L helicopter circuit at Leicester. He was flying at 700ft agl when he encountered a fixed-wing aircraft travelling in the opposite direction with approximately 100ft vertical separation above him. It was presumably descending deadside to the fixed wing circuit; however, the fixed-wing circuit at Leicester is at 1000ft to give 300ft separation from helicopters. He lowered the collective to descend and a radio call reporting the incident was made to Leicester at the time.

He assessed the risk of collision as ‘High’.

THE PA38 PILOT reports that he joined for RW28RH, deadside from the south. A threat and error management brief was performed; helicopter traffic and the difference between the QFE and QNH was identified as threats. Effective look-out and a QFE cross-check was performed prior to entering the circuit. He descended to 1000ft in accordance with procedures, and a normal circuit and landing was performed. He did not see the other traffic, however the published helicopter circuit is promulgated as 700ft QFE, therefore he believed a minimum of 300ft separation would have been assured if the published procedure was followed by the helicopter traffic.

He assessed the risk of collision as ‘None’.

THE LEICESTER AIR/GROUND OPERATOR reports that Leicester were using RW28R for fixed-wing aircraft and RW28L for rotary. He received a call from the Cabri pilot that a fixed-wing aircraft was 100ft from him going in the opposite direction. He looked out and could see the PA38 crossing the 10 numbers; it looked to be lower than usual. The PA38 was a visiting aircraft which had booked in for 30 minutes of circuits.

Factual Background

The weather at East Midlands was recorded as follows:

METAR EGNX 301050Z 29008KT 250V340 9999 VCSH BKN030 11/01 Q1020=

Analysis and Investigation

UKAB Secretariat

The Cabri and PA38 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard¹. 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 operation².

Summary

An Airprox was reported when a Cabri and a PA38 flew into proximity at 1100 on 30th April 2016. Both pilots were operating under VFR in VMC and both were receiving an Air-to-Ground Service from Leicester and operating in the visual circuit, the Cabri in the rotary circuit and the PA38 in the fixed-wing circuit.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from the pilots of both aircraft and a report from the Leicester Air/Ground Operator.

The Board opined that it was unfortunate that the incident had not shown on the NATS radars, because without any replay they had no way of knowing whether the Cabri pilot was simply startled by suddenly seeing the PA38, or the PA38 was indeed flying too low. This made determining the cause of the Airprox difficult because it was effectively one pilot's comments against the other.

Noting that the Cabri pilot was a Leicester-based aircraft, some members thought that he would be used to seeing the fixed wing circuit above him and so would have only commented if he thought that the PA38 was lower than normal. On the other hand, other members commented that the PA38 pilot had reported that he had consciously conducted a pre-joining brief that had covered the fact that the helicopter and fixed-wing circuits were close in height, and that careful attention to QFE/QNH settings was required. That being said, the Board also noted that the preferred method of joining at Leicester was via an overhead join, which would have afforded the PA38 pilot the opportunity to look for the circuit traffic whilst still high and in the overhead, and they wondered why he had chosen to join 'deadside' to the fixed-wing circuit which was actually also 'liveside' to the opposite direction helicopter circuit.

The Board had no way of knowing for sure what the height of the PA38 was and, even though the A/G operator had reported that he thought it was lower than normal as it turned over the RW10 threshold, the inaccuracies of ground observation of aircraft height were well known. In the absence of more reliable information, the Board decided that the cause of the incident was best described simply as the Cabri pilot being concerned by the proximity of the PA38. Turning to the risk, the Board noted that the PA38 pilot had not seen the Cabri at all, and that the Cabri pilot had felt that the collision risk was high and had also felt the need to manoeuvre to ensure sufficient separation. As a result, Board members thought that this was not a case of normal operations with just a misperception of separation. A short debate occurred over whether this was a Category B incident where safety had been much reduced below normal; however, because the Cabri pilot had been

¹ SERA.3205 Proximity.

² SERA.3225 Operation on and in the Vicinity of an Aerodrome.

visual with the PA38 and had seemed to have taken timely and effective actions, the Board assessed the risk as Category C.

Noting that there have been a number of Airprox in the Leicester circuit in recent months, often involving helicopter and fixed-wing traffic, the Board wondered whether it was timely to review the suitability of the extant mixed-traffic, mixed-runway operations. More specifically, although it was for Leicester to determine local needs and requirements, some members wondered whether opposite direction helicopter and fixed-wing circuits were the best method of deconflicting such traffic as opposed to same direction circuits, which would remove the risk of aircraft flying in opposite directions if 'deadside' joins were in regular use. As a result, the Board resolved to recommend that Leicester review their circuit procedures.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: The Cabri G2 pilot was concerned by the proximity of the PA38.

Degree of Risk: C.

Recommendation: Leicester review their circuit procedures.