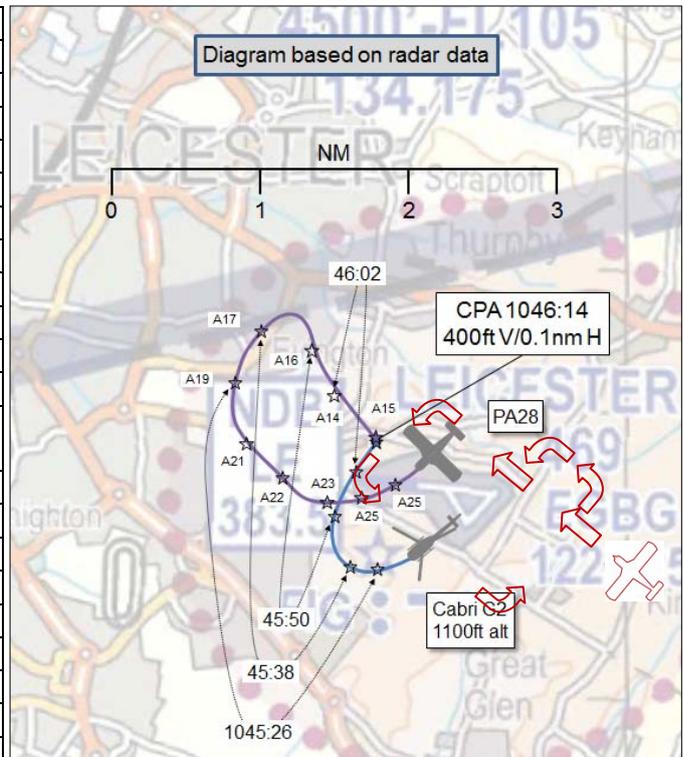


**AIRPROX REPORT No 2016052**

Date: 01 Apr 2016 Time: 1046Z Position: 5237N 00103W Location: Leicester (elev 469ft)

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

Recorded	Aircraft 1	Aircraft 2
Aircraft	Cabri G2	PA28
Operator	Civ Trg	Civ Trg
Airspace	Leicester ATZ	Leicester ATZ
Class	G	G
Rules	VFR	VFR
Service	AGCS	AGCS
Provider	Leicester Radio	Leicester Radio
Altitude/FL	700ft	1000ft
Transponder	On/C	On/S
<b>Reported</b>		
Colours	NK	White
Lighting	NK	Strobe, Landing light
Conditions	VMC	VMC
Visibility	10km	>10km
Altitude/FL	700ft	1500ft
Altimeter	QFE	QNH (1017hPa)
Heading	040°	NK
Speed	70kt	100kt
ACAS/TAS	Not fitted	Not fitted
Alert	N/A	N/A
<b>Separation</b>		
Reported	200ft V/0ft H	200-300ftV
Recorded	300ft V/>0.1nm H	



**THE CABRI G2 PILOT** reports he was downwind on circuit RW22RH for rotary at 700ft AGL. He noticed a PA28 on a reciprocal heading with a relative bearing of 315 degrees at the same height. He repeated his radio call to say he was downwind and then he descended to 500ft AGL. The PA28 passed directly overhead. It appeared to the Cabri pilot that the PA28 was cutting through the rotary circuit to get to the fixed wing circuit of RW22LH at 1000ft AGL.

He assessed the risk of collision as 'High'.

**THE PA28 PILOT** reports the alleged incident was some time ago and because the event was not considered serious by himself at the time a detailed recollection is not clear. He recalls a helicopter passing under his aircraft and wouldn't have had time to react even if he thought it necessary. He was carrying out a standard overhead join which was one of the main objectives of the student's comprehensive briefing and flight exercise. The student flew the join well, as briefed and accurately. They overflew the active runway at 2000ft AGL, descended on the fixed-wing deadside and joined the circuit crosswind at 1500ft QNH (approx 1000ft AGL). He recalls that the helicopter passed beneath him just before crossing the RW04 end at circuit height starting the crosswind leg. He would have noticed and corrected the student if he thought they were not at or very near the correct level. To his recollection, standard radio calls to AGCS were made and responded to. He believes that if the incident is of the helicopter he saw, then the different levels of the circuit heights for fixed-wing and rotary craft was effective.

He assessed the risk of collision as 'Low'.

## Factual Background

The weather at Wittering was recorded as follows:

METAR EGXT 010850Z 19011KT CAVOK 07/03 Q1018 BLU

## Analysis and Investigation

### UKAB Secretariat

The Cabri G2 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>.

Leicester Aerodrome Visual Circuit Flight Procedures as published in the UKAIP AD 2.22 are:

- (a) Fixed wing circuits left hand on Runways 10, 33, 22, 34 and 24. Fixed wing circuits right hand on Runways 28, 15, 04, 16 and 06.*
- (b) The standard overhead join is preferred for fixed wing.*
- (c) Fixed wing circuits will be at 1000ft QFE*
- (d) Helicopter circuits are to the left on runways 28, 15, 04, 16 and 06. Helicopter Circuits are to the right on runways 10, 33, 22, 34 and 24.*
- (e) Helicopter circuits will be at 700ft QFE.*
- (f) Helicopter joins for a right hand circuit will be downwind. Joins for left hand circuits are overhead.*

## Summary

An Airprox was reported when a Cabri G2 and a PA28 flew into proximity at Leicester Airfield at 1046 on Friday 1<sup>st</sup> April 2016. Both pilots were operating under VFR in VMC, both in receipt of an A/G Service from Leicester Radio.

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

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

The Board first looked at the radar replays to determine the actions of the PA28 pilot. As depicted in the diagram on page 1 of this report (where the red arrows show the direction of the expected standard overhead join), the PA28 pilot had flown an unorthodox overhead join with little indication either that he had allowed for the active state of the helicopter circuit. GA members highlighted that by descending from the overhead to 1000ft AGL to the north of the airfield, and then tracking across the helicopter circuit, the PA28 had flown across the helicopter circuit too low and they reiterated that the PA28 should have maintained his height until he was clear of the helicopter circuit before descending onto the downwind leg; had he done this, even though his track was contrary to normal procedures, the Airprox would probably not have occurred. Given the complexity of multi-type aircraft at Leicester operating from multiple runways with only an AGCS, the Board were heartened to hear that Leicester was carrying out preventative measures to highlight circuit directions by means of notices, flyers and a radio broadcast on contact to ensure that fixed wing pilots were aware when the helicopter circuit is active.

Moving to the cause and risk, the Board quickly agreed that the PA28 pilot had flown into conflict with the Cabri G2 whilst not conforming to the standard overhead join. The Board then assessed the risk

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

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

and, noting that helicopter circuits were at 700ft and fixed-wing circuits at 1000ft, although the PA28 pilot had descended inappropriately to fly across the helicopter circuit, they did not believe that he would have gone below the 1000ft fixed-wing circuit height and so procedural separation of 300ft would still have remained. Noting also that the helicopter pilot had seen the PA28 at an early stage and had descended to increase separation, the Board therefore assessed this as a Category C risk, timely and effective action had been taken, there had been no risk of collision.

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

Cause: The PA28 pilot did not conform to the overhead join procedure and flew into conflict with the Cabri G2.

Degree of Risk: C.