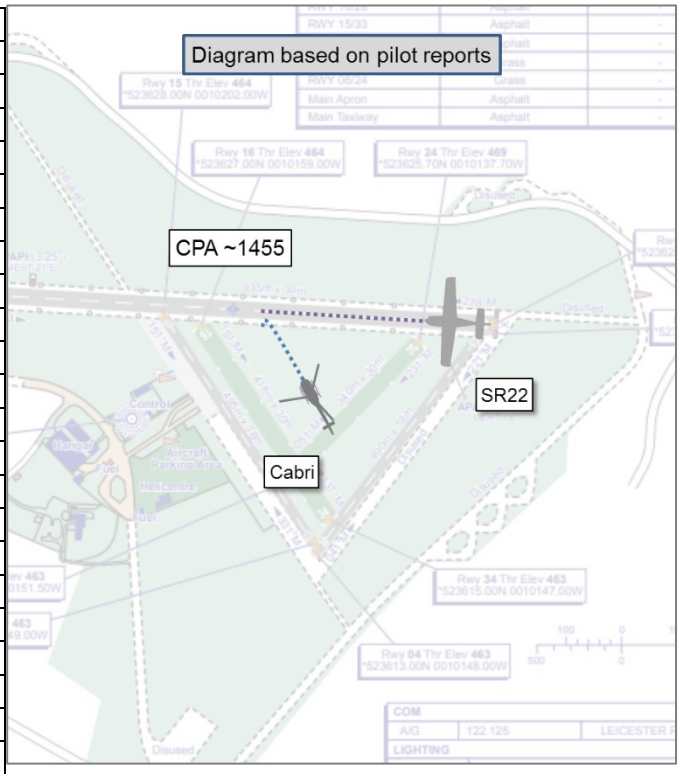
AIRPROX REPORT No 2018312

Date: 03 Dec 2018 Time: 1455Z Position: 5236N 00102W Location: Leicester aerodrome

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Cabri	SR22
Operator	Civ Helo	Civ FW
Airspace	Leicester ATZ	Leicester ATZ
Class	G	G
Rules	VFR	VFR
Service	AGCS	AGCS
Provider	Leicester	Leicester
Altitude/FL	NK	NK
Transponder	A, C, S	A, C, S
Reported		
Colours	NK	NK
Lighting	NK	NK
Conditions	NK	NK
Visibility	NK	NK
Altitude/FL	0ft	NK
Altimeter	agl	NK
Heading	NK	280°
Speed	NK	NK
ACAS/TAS	NK	NK
Alert	NK	NK
Separation		
Reported	NK	'within 2m'
Recorded	NK	



THE CABRI INSTRUCTOR reports conducting a circuit lesson on RW33R with a busy fixed-wing circuit. Prior to taking off for the last circuit, and after making a 90° 'look-turn' to the left, the student called for departure. After receiving wind velocity and direction, the student transitioned. Not being 90° to RW28, the instructor [seated on the left] was slightly unsighted but he scanned right and saw an SR22. He took control, performed a quick-stop and banked over to avoid a collision. The SR22 pilot called to say that he had called final for RW28; the A/G Controller confirmed that the active runway was RW33. The Cabri instructor stated that he had not heard a call for RW28 and was not aware of fixed-wing traffic in that circuit.

He did not make an assessment of the risk of collision.

THE SR22 PILOT did not respond to UKAB or Leicester requests for a completed Airprox report but provided a short narrative to Leicester Aero Club.

> 'Using RW28 I called downwind base and final for 28 R/H. A/G operator confirmed 300 @ 8kt. Runway 28 was clear and no obstacles, called short final prior to touchdown. On landing roll helicopter quickly approached at 90° from my left and I was unable to take any avoiding action. I continued with the go round and informed Leicester Radio immediately. I would say the helicopter was within 2 meters of my aircraft.'

THE LEICESTER A/G OPERATOR reports that the SR22 pilot called for airfield information and was passed the duty runway, RW33, left-hand for fixed-wing and right-hand for rotary aircraft. The Cabri pilot was carrying out manoeuvres on the grass area. The SR22 pilot called downwind, base and final for RW28. At this point the A/G Operator gave him the wind direction and speed. After he had touched down and was rolling down RW28, the helicopter took off and called taking off RW33. Before the A/G Operator could give any information, he had reached the end of RW33 grass. At this point the SR22

was almost opposite the end of RW33, the helicopter pilot did not see the fixed-wing traffic until the last second. He pulled up and returned to the centre of the grass area.

Factual Background

The weather at East Midlands was recorded as follows:

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METAR EGNX 031520Z 29007KT 9999 FEW026 07/04 Q1000=
METAR EGNX 031450Z 31013KT 9999 FEW020 08/04 Q0999=
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Analysis and Investigation

UKAB Secretariat

The Cabri and SR22 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]. 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[2].

Radar replay showed that the SR22 pilot was conducting circuits to RW33 until the Airprox event, which was his first circuit of several to RW28.

Summary

An Airprox was reported when a Cabri G2 and an SR22 flew into proximity in the Leicester visual circuit at about 1455hrs on Monday 3rd December 2018. Both pilots were operating under VFR in VMC, both in receipt of an AGCS from Leicester Radio.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of a report from the Cabri pilot, a short narrative from the SR22 pilot and a report from the A/G Operator involved. Radar photographs/video recordings did not show the aircraft tracks at CPA.

Members first considered the SR22 pilot's actions. The Board expressed their disappointment that the SR22 pilot had not felt able to submit an Airprox report. Members surmised that this was perhaps due to apprehension over the Airprox process, for which they stressed the confidential, no blame nature of the process. It was apparent that he had completed a number of circuits operating from RW33 in the right-hand fixed-wing circuit for that runway, and that the circuit to RW28 on which the Airprox occurred was the first of a series to that runway. Reports indicated that he had made the correct R/T calls for RW28, and he had commented that he had seen the Cabri approaching from the left to 'within 2m' during his roll. Members agreed that there was little he could have done other than to try and stop before the Cabri crossed, or to turn left or right off the runway as an emergency excursion. Members also agreed that this event would have presented a situation for which the SR22 pilot had not trained, and that the startle-factor would most likely have precluded effective avoiding action.

Turning to the Cabri crew, members noted that the Cabri student pilot had made a lookout-turn to the left but had not done so to the right. The Board considered that with fixed-wing aircraft (the SR22) operating in the visual circuit it was incumbent on the Cabri crew to look both ways before transitioning, whichever runway the SR22 pilot opted to use. Members therefore agreed that the Cabri pilot had not cleared his path across RW28 before starting to transition, and that this was a contributory factor.

The Board then questioned the concurrent use of different runways under the auspices of an A/G Operator and were briefed by the CAA Airspace advisor that although the Airport Operator could

[1] SERA.3205 Proximity.
[2] SERA.3225 Operation on and in the Vicinity of an Aerodrome.

designate a runway for use through the A/G Operator, in the absence of that occurring, it was permissible for individual pilots to select the runway most appropriate for their circumstances. The Board noted that this freedom of choice conferred an exacting obligation on other pilots to assimilate each other's intentions, and that in this instance neither of the Cabri's crew had assimilated the SR22 pilot's R/T calls concerning his approach to RW28. The Board considered that this was also a contributory factor.

In the event, the Cabri student transitioned away from 'the H' without being aware of the approaching SR22, already rolling along RW28. Members agreed that the information that the SR22 pilot was making an approach to RW28 had been available via R/T and that the aircraft was there to be seen. Unfortunately, neither of these barriers functioned in a timely fashion and the Board agreed that the Airprox had been caused when the Cabri pilot transitioned into conflict with the SR22 on RW28. Turning to the risk, the Board noted that the SR22 pilot had stated that separation was 'within 2m' but that the Cabri Instructor had not made an assessment of risk. However, his description of having to take control, make a quick-stop and bank away from the SR22 indicated to the Board that the aircraft had been in very close proximity indeed. After some discussion, the Board unanimously agreed that the Cabri instructor's fortuitous very late sighting of the SR22 had represented a situation in which a serious risk of collision had existed which stopped just short of a collision.

The Board spent some time discussing the potential for complexity of operations at Leicester aerodrome. With a total of 10 runways and mixed types in opposite direction visual circuits, members agreed that this was not of itself necessarily an issue but that such complexity could be seen as the basis for further mitigation against risk in the form of information, guidance or control from the ground. The Board felt that guidance as to the establishment of an appropriate level of service for a given level of complexity would be a valuable addition to aerodrome safety management systems, and resolved to recommend that, '*The CAA develop guidance for aerodrome operators regarding complexity of operations versus the level of ATS provision*'.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: The Cabri pilot transitioned into conflict with the SR22 on RW28.

Contributory Factors: 1. The Cabri pilot did not assimilate the SR22 pilot's R/T calls for RW28.
2. The Cabri pilot did not positively clear his path across RW28 before starting to transition.

Degree of Risk: A.

Recommendations: The CAA develop guidance for aerodrome operators regarding complexity of operations versus the level of ATS provision.

Safety Barrier Assessment[3]

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

ANSP:

Regulations, Processes, Procedures & Compliance were assessed as **partially effective** because the management of concurrent runway procedures was lacking in some respects.

Situational Awareness and Action were assessed as **not used** because an A/G operator was not required to maintain situational awareness or act with regard to collision avoidance.

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

Flight Crew:

Tactical Planning was assessed as **ineffective** because the Cabri pilot did not visually check to the right before departing from RW33.

Situational Awareness and Action were assessed as **ineffective** because the Cabri crew did not assimilate the SR22 pilot's R/T calls of downwind, base and final for RW28.

See and Avoid were assessed as **partially effective** because the Cabri instructor saw the SR22 at a late stage.