

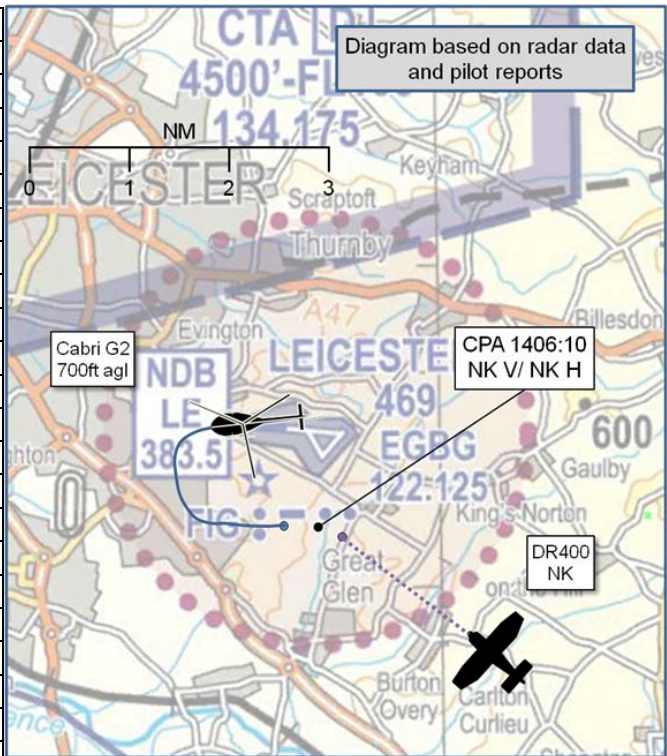
AIRPROX REPORT No 2015099

Date: 29 Jun 2015 Time: 14.08Z Position: 52 36N 00102W

Location: Leicester Airport

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Cabri G2	DR400
Operator	Civ Trg	Civ Club
Airspace	ATZ	ATZ
Class	G	G
Rules	VFR	VFR
Service	AGCS	AGCS
Provider	Leicester Radio	Leicester Radio
Altitude/FL	700ft	1000ft
Transponder	On A,C	Standby A,C
Reported		
Colours	Grey/white	Blue/white
Lighting	HISL	HISL
Conditions	VMC	VMC
Visibility	10K	10K
Altitude/FL	650ft	1000ft
Altimeter	QFE (1004hPa)	NK
Heading	100°	280°
Speed	70kt	90kt
ACAS/TAS	Not fitted	Not fitted
Separation		
Reported	30ft V/50m H	NK
Recorded	NK	



THE CABRI G2 PILOT reports being downwind left-hand for RWY28 at Leicester at 700ft QFE. He was made aware of fixed-wing traffic joining deadside for the right-hand fixed-wing circuit so kept a good lookout. He spotted opposite direction traffic at the same level at a range of 500m and took evasive action to avoid. He later spoke to the pilot, who did not seem concerned about the incident. This pilot informed him that the DR400 was positioning in to get a ‘dodgy’ altimeter fixed and was using Sat Nav for altitude guidance. The Cabri pilot also spoke to the A/G operator who was concerned that the correct pressure setting had not been passed.

He assessed the risk of collision as ‘High’.

THE DR400 PILOT reports being inbound to Leicester to join deadside right-hand RWY28. He experienced problems with the altimeter when he attempted to set the QFE, the needles moved but the scale didn’t. He compensated for this by reducing the setting by 500ft from that shown when on the QNH in order to compensate for the elevation of the aerodrome. On the deadside descent, just before the right turn towards the active runway, he noticed a helicopter pass below him. He stated that he did not descend below 1000ft on the deadside.

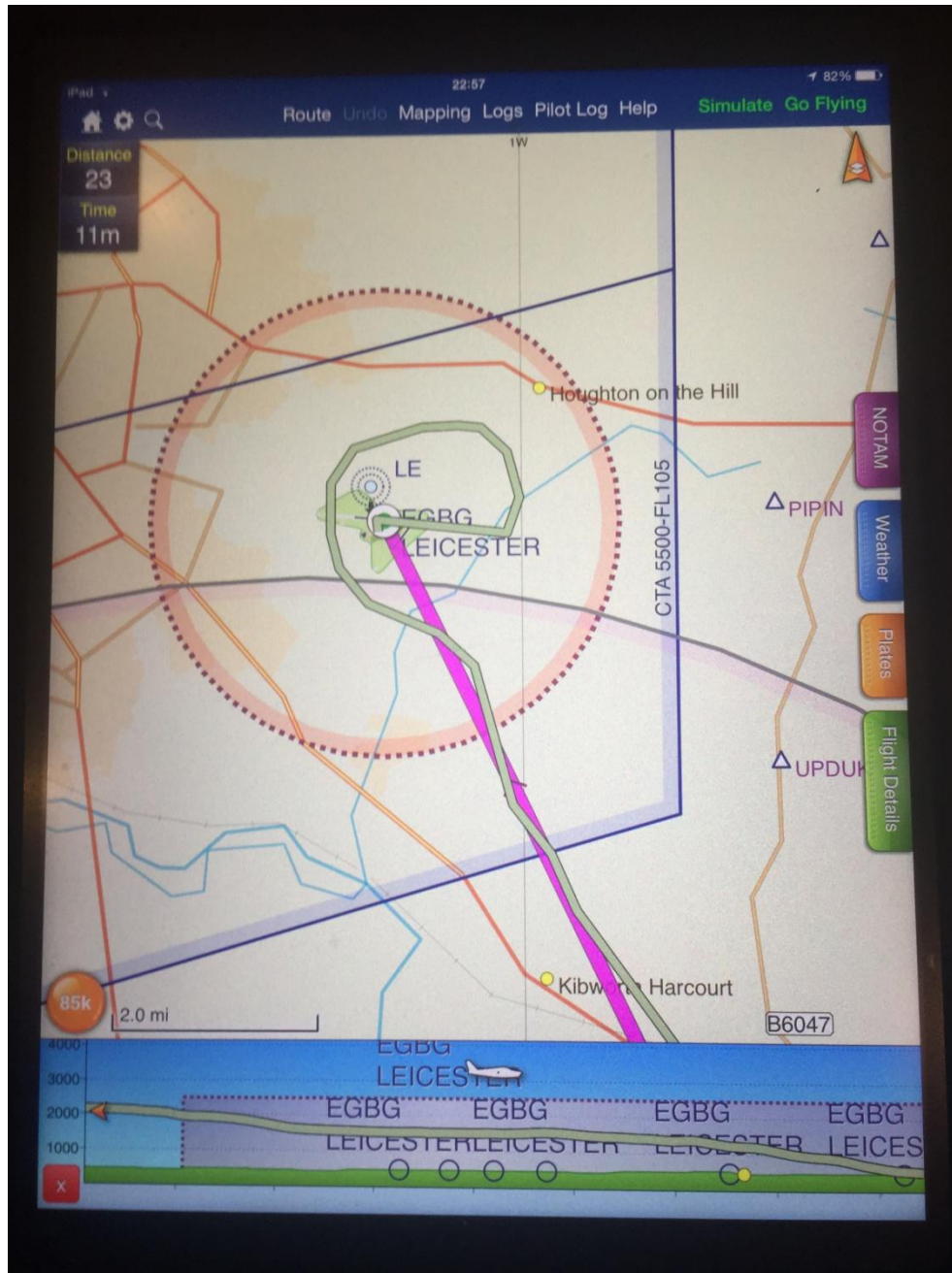
He assessed the risk of collision as ‘Low’.

Factual Background

The East Midlands weather at the time was:

METAR EGNX 291350Z 21008KT 160V270 9999 SCT038 SCT045 21/11 Q1021

The DR400 pilot supplied the screenshot below of his Skydemon log showing the portion approaching Leicester, which appears to indicate that the DR400 maintained just above 1000ft inside the Leicester ATZ, until on final approach.



Analysis and Investigation

UKAB Secretariat

Both pilots shared an equal responsibility for not flying into such proximity as to create a collision hazard¹. An aircraft operated on or in the vicinity of an aerodrome shall²:

¹ SERA 3205, Proximity.

² SERA.3225, Operation on and in the vicinity of an aerodrome.

- (a) observe other aerodrome traffic for the purpose of avoiding collision;
- (b) conform with or avoid the pattern of traffic formed by other aircraft in operation;

The UK AIP at AD 2.EGBG-6³ states:

'1 Circuits

- (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 DR400 flew into proximity at 1408 on Monday 29th June 2015. Both pilots were operating under VFR in VMC, and both were in receipt of an Air/Ground service from Leicester Radio.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from the pilots of both aircraft and area radar recordings together with a Skydemon log of the DR400 flight.

The Board first noted that the procedures at Leicester allowed for helicopters and fixed-wing aircraft to conduct opposite direction flights with the helicopter downwind being at 700ft and the fixed-wing deadside being at 1000ft. The Board discussed at length the fact that the joining on the 'fixed-wing deadside' was somewhat of a misnomer because that side of the airfield was actually active up to 700ft thus only giving some 300ft separation from the helicopter circuit. In setting the context for the discussion, members recalled that a recent Airprox investigation had discussed the same procedures at length, and had concluded that they were safe *provided pilots complied with the appropriate height restriction, which was an important consideration* (Airprox 2015048).

In discussing the actions of the DR400 pilot, the Board noted that he had elected to join on the 'deadside' whilst the helicopter circuit was active and they wondered whether he had assimilated fully that this put him into potential conflict with the Cabri G2 whereas, in contrast, a standard overhead join would have built in some separation from the left-hand circuit and allowed him to assess the circuit flow. They were especially concerned that he had done so despite knowing that he could not set his altimeter accurately, and that height separation was critical even with a fully serviceable altimeter – especially as there were no ATC services to assist either, only an A/G operator. Unfortunately, radar recordings for the event were incomplete, and it was thus impossible to ascertain the exact height of the DR400 as it flew deadside, although the Skydemon log appears to show the aircraft at approximately 1000ft agl as it entered the Leicester ATZ .

Turning to the Cabri G2 pilot, the Board noted that he was aware of the potential joining traffic and was keeping a good lookout. Nevertheless, the sight of the DR400 had concerned him sufficiently enough to take evasive action. The Board could not determine whether this was because the DR400 pilot was lower than he should be, or whether the Cabri pilot had misjudged the visual picture of 300ft separation, which had been the case before at Leicester for helicopter pilots sighting fixed-wing aircraft in similar situations.

Notwithstanding the lack of positive data, the Board decided that in conducting a 'deadside' join with an uncertain altimeter setting in what was a critical separation environment, the cause of the Airprox

³ EGBG AD 2.22 FLIGHT PROCEDURES

was that the DR400 pilot had flown into conflict with the Cabri G2. Because the helicopter pilot had had to take evasive action to avoid a collision, they agreed that safety margins had been much reduced below the norm.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: The DR400 pilot flew into conflict with the Cabri G2.

Degree of Risk: B.