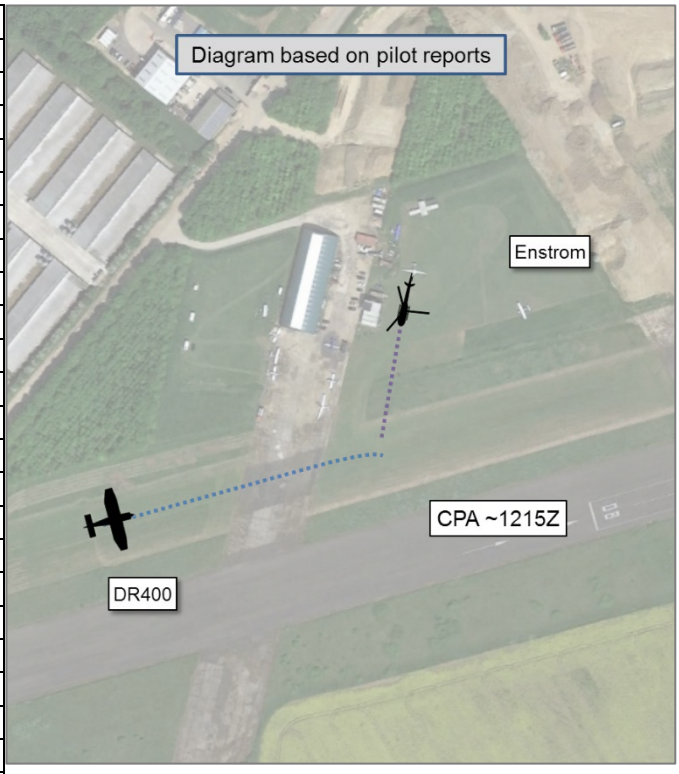
AIRPROX REPORT No 2019256

Date: 24 Aug 2019 Time: 1215Z Position: 5156N 00126W Location: Enstone airfield northside

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	DR400	Enstrom 280
Operator	Civ FW	Civ Helo
Airspace	Enstone ATZ	Enstone ATZ
Class	G	G
Rules	VFR	VFR
Service	AGCS	AGCS
Provider	Enstone	Enstone
Altitude/FL	NK	NK
Transponder	NK	NK
Reported		
Colours	NK	Silver, blue
Lighting	NK	HISL, nav
Conditions	VMC	VMC
Visibility	NK	8km
Altitude/FL	'In the flare'	15ft
Altimeter	NK	QNH (1020hPa)
Heading	080°	190°
Speed	NK	5kt
ACAS/TAS	NK	Not fitted
Alert	NK	N/A
Separation		
Reported	0ft V/120m H	50ft V/50ft H
Recorded	NK	



THE DR400 PILOT reports that he arrived at Enstone from the south, contacted Enstone Radio and obtained airfield information. Because there was no other reported traffic, he stated that he would join crosswind for the northside grass RW08. He made further blind calls for crosswind, downwind and final for RW08 northside grass. On short-final to RW08 grass he saw an Enstrom helicopter with rotors running, stationary to the left of the runway by the Enstone Flying Club hangar. It appeared to be on the ground before commencing a hover-taxi. Whilst he was in the flare, crossing over the first hard intersection of a disused runway, the Enstrom helicopter began to move out from the left, coming into direct conflict with his landing path, hovering at around 10-15ft. At this point he estimated they were no more than 120m from each other. He immediately applied full power and proceeded to go around, moving the aircraft right to take evasive action to avoid collision from the left-hand side. The helicopter pulled back in a nose-high attitude to avoid conflict. Whilst obtaining climb airspeed in ground effect, the DR400 pilot left the grass runway passing through some long grass to the right of the grass runway before getting airborne. He called 'going around', climbed away to rejoin the circuit and made a second uneventful landing on RW08 grass, all the time making blind calls on Enstone Radio. The pilot noted that witnesses saw the drama unfold from the ground at the clubhouse and hangar for Enstone Flying Club. After landing, he met the pilot of the Enstrom helicopter to discuss the near miss. He said he did not see the DR400 until the moment it was in the flare, taking him by surprise that an aircraft was landing on the northside grass runway. There were trees to the right of his lift off position which blocked his view and he hadn't heard the DR400 pilot's radio calls. The DR400 pilot stated that he could certainly hear the Enstrom pilot as he exclaimed on the radio when it was very nearly a disaster! They were both thankful to be alive and able to walk away.

An observer on the ground stated as follows: At approximately 11:30 UTC on Saturday 24th August a very near collision occurred between a Robin DR400 and Enstrom helicopter at Enstone airfield. While the Robin DR400 was very late on final approach to the north-side grass RW08 the Enstrom lifted and began to hover-taxi to the south from the fuel pumps near the flying school. The observer was watching

from the other end of the runway and was very surprised to see this coming into view. The Enstrom continued to hover-taxi to the south and appeared to slow its forward momentum, to his relief, but then almost immediately began to lift into departure southbound, clearly not seeing the Robin despite both its landing lights being on. At this point the Robin was in the flare and it became clear that a collision was highly likely. Seeing the Enstrom, the pilot of the Robin began to turn away before touching down and was in a 5° right wing low attitude when the wheels touched down. This was around the point when the Enstrom had seen the Robin and also began avoiding action. The Robin turned sharply to the right and ended up going through the long grass and on to the hard runway. The Robin applied power, took off and went around. It made a very nice landing on the north grass runway 08 and the Enstrom landed to the south of the hard runway. An inspection was made of the Robin by a licensed engineer and established no damage had occurred, just the removal of a few pieces of long grass that had caught in the wheel-spat fasteners. Both pilots met each other and discussed the matter. There had been less than ten metres separation. It was claimed blind calls had been made on frequency by both parties but the pilot of the Robin had heard nothing. The Enstrom pilot stated that he had been coming to Enstone for the last 15 years to get fuel and that 'no one ever lands on that runway'.

THE ENSTROM PILOT reports that he had flown to Enstone for fuel and parked at the pumps. Once refuled, and after a sort break, he decided to return to base. He initiated start-up, got the aircraft ready for flight, asked for a radio check and got a reply of 'readability 5'. He then transmitted his intentions, to lift from the pumps and depart to the south. He lifted into a hover and taxied to the north side of RW08 grass, where he checked for traffic. He then transmitted his intentions to cross active runways and depart to the south. As he started to move forward, he checked for traffic again and at that point saw the aircraft to his right on the ground run. He immediately pulled back on the cyclic and collective to climb and induced backwards flight. The Robin passed right-to-left in front and below, on the grass for about 100ft to 150ft before swerving onto the hard runway. The Enstrom pilot landed and made contact with the fixed-wing pilot.

THE ENSTONE A/G OPERATOR did not file a report.

Factual Background

The weather at Oxford was recorded as follows:

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METAR EGTK 241220Z 18009KT 150V210 CAVOK 27/11 Q1018=
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Analysis and Investigation

UKAB Secretariat

The DR400 and Enstrom 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]. 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[3].

The area radar replay did not capture the aircraft tracks.

Summary

An Airprox was reported when a DR400 and an Enstrom 280 flew into proximity over the grass runway at Enstone at about 1215Z on Saturday 24th August 2019. Both pilots were operating under VFR in VMC, both in receipt of an AGCS from Enstone Radio.

[1] SERA.3205 Proximity.
[2] SERA.3225 Operation on and in the Vicinity of an Aerodrome.
[3] SERA. 3210 Right-of-way.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots and a ground observer. Relevant contributory factors mentioned during the Board's discussions are highlighted within the text in bold, with the numbers referring to the Contributory Factors table displayed in Part C.

Members first discussed the AGCS and noted that there was no requirement for an A/G Operator to routinely check the approach for traffic on final (**CF1**) when receiving calls or passing information. That being said, members unanimously agreed that they should pass on traffic calls that they have received. Unfortunately, in the absence of any recorded R/T or a report from the A/G Operator, it was not possible to determine positively the exact R/T transmissions. Assuming that the pilots had made the calls that they reported they had, members surmised from the pilots' reports that the A/G Operator either did not receive or did not pass on the pilots' reports of their position and intentions. That being said, the Board also noted that neither pilot appeared to have assimilated the R/T calls of the other pilot (**CF5**), and members similarly wondered whether AGCS R/T transmissions would have been assimilated by them.

Turning to the pilots' actions, their reports indicated that the aircraft were being operated iaw normal procedures up until the Enstrom pilot moved forward to cross the grass runway. It was incumbent upon him to give way to landing aircraft, which he did not (**CF2**), and members wondered if this had been influenced in part by his expectation that aircraft would not be landing on RW08. This incident highlighted the need for thorough lookout in all directions before crossing any operating surface (**CF3**), especially at airfields with mixed types; not only was this required for the safe and efficient flow of traffic (**CF4**, **CF6**), but also in case radio-fail or non-radio traffic were making an unannounced approach. It was apparent from each pilots' report that the aircraft had come into close proximity at both a high workload and critical stage of flight, with a late sighting by the Enstrom pilot (**CF7**), and the Board thought it fortunate that neither pilot had lost control of their aircraft during their avoiding action manoeuvres. Accordingly, members agreed that collision had only just been averted, risk Category A.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2019256		
CF	**Factor**	**Description**	**Amplification**
	Ground Elements		
	• Situational Awareness and Action		
1	Contextual	• Situational Awareness and Sensory Events	Not required to monitor the aircraft under the agreed service
	Flight Elements		
	• Regulations, Processes, Procedures and Compliance		
2	Human Factors	• Flight Crew ATM Procedure Deviation	Regulations/procedures not complied with
	• Tactical Planning and Execution		
3	Human Factors	• Action Performed Incorrectly	Incorrect or ineffective execution
4	Human Factors	• Aircraft Navigation	Did not avoid/conform with the pattern of traffic already formed
	• Situational Awareness of the Conflicting Aircraft and Action		
5	Human Factors	• Understanding/Comprehension	Pilot did not assimilate conflict information
6	Human Factors	• Monitoring of Other Aircraft	Pilot did not sufficiently integrate with the other aircraft
	• See and Avoid		
7	Human Factors	• Monitoring of Other Aircraft	Late-sighting by one or both pilots

Degree of Risk: A.

Recommendation: Nil.

Safety Barrier Assessment[4]

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

Ground Elements:

Situational Awareness of the Confliction and Action were assessed as **not used** because neither pilot was operating under a service that required the monitoring of their flight by ground elements.

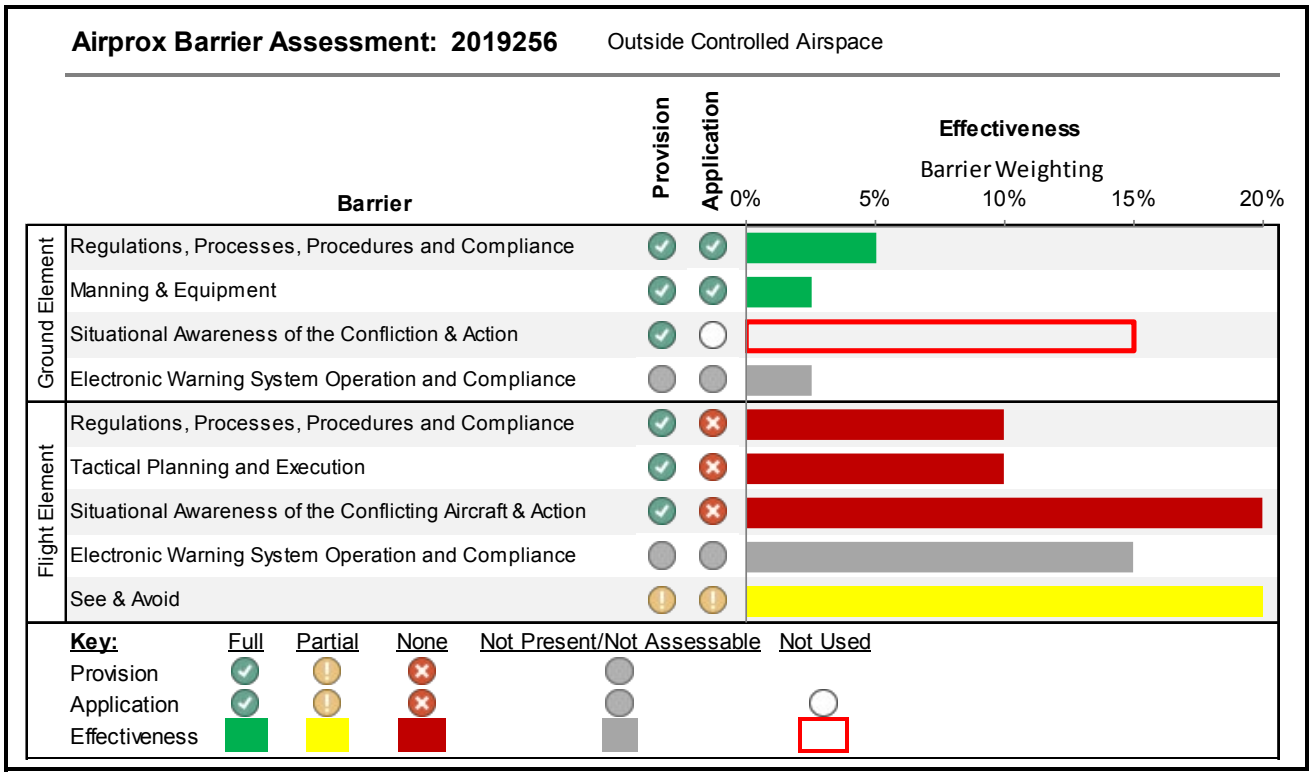
Flight Elements:

Regulations, Processes, Procedures and Compliance were assessed as **ineffective** because the Enstrom pilot did not give way to landing traffic.

Tactical Planning and Execution was assessed as **ineffective** because the Enstrom pilot did not take account of aircraft that might be landing on RW08.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because neither pilot assimilated the R/T calls of the other.

See and Avoid were assessed as **partially effective** because avoiding action was only taken at a very late stage.



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