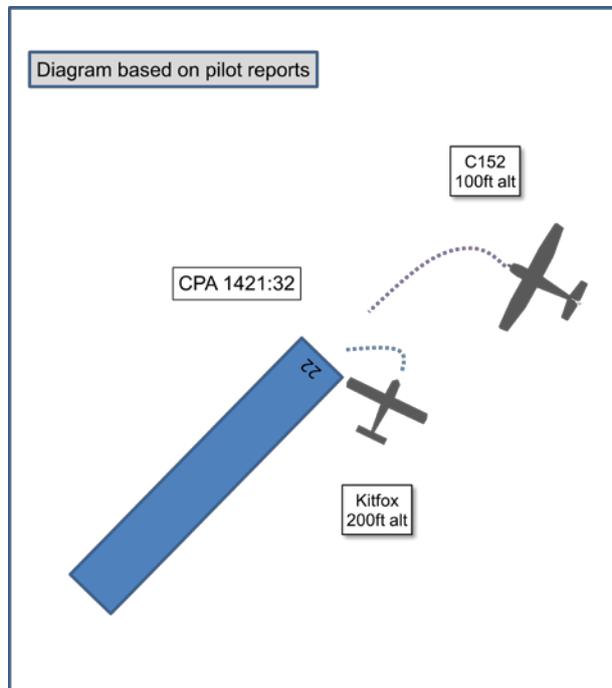


**AIRPROX REPORT No 2015203**

Date: 11 Nov 2015 Time: 1125Z Position: 5434N 00541W Location: Newtownards ATZ

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

Recorded	Aircraft 1	Aircraft 2
Aircraft	C152	Kitfox
Operator	Civ Club	Civ Pte
Airspace	Newtownards ATZ	Newtownards ATZ
Class	G	G
Rules	VFR	VFR
Service	AGCS	AGCS
Provider	Newtownards	Newtownards
Altitude/FL	NK	NK
Transponder	Standby	Not fitted
<b>Reported</b>		
Colours	White, Blue	Silver, Red
Lighting	Strobes, Landing	Strobe
Conditions	VMC	VMC
Visibility	20nm	>10km
Altitude/FL	100ft	200ft
Altimeter	QNH (1012hPa)	NK
Heading	220°	220°
Speed	60kt	55kt
ACAS/TAS	Not fitted	Not fitted
<b>Separation</b>		
Reported	0ft V/30m H	Not seen
Recorded	NK	



**THE C152 PILOT** reports that he was in the circuit, undertaking a circuit detail with a qualified pilot who was out of currency. He heard the Kitfox pilot ask for the airfield information, the Kitfox appeared to have a problem with his radio but he took off anyway, meaning that there were now 3 aircraft in the circuit, a Thruster, the Kitfox and his C152. The Thruster instructor advised over the RTF that he would be sending his student solo and intended to land, get out of the aircraft on the runway, and allow the student to continue solo. At this point, the Kitfox was just turning downwind and the C152 was on a base leg. Subsequently, at 100ft on final approach, he suddenly saw the Kitfox converging from the left at a steep angle of bank, at a similar height. He took control from the student and took avoiding action by moving right onto the dead-side; he transmitted “aircraft just short final you have just missed us – going around”. He opined that if his student had been flying solo and the right-hand seat had been empty, the two aircraft would likely have collided. He carried out a further circuit and landed. He discussed the incident with the Kitfox pilot who tried to explain why he hadn’t see them.

He assessed the risk of collision as ‘High’.

**THE KITFOX PILOT** reports that he was the instructor for a revision training flight. The sortie included a number of circuits, which were flown at the microlight circuit height of 700ft because the Kitfox has a similar performance to a microlight. He recalled that there were two other aircraft in the circuit, a C152 and a Thruster microlight. The C152 left the circuit he thought, and then re-joined and reported final, no further RTF calls were heard from it after that. They were climbing out, having just made an approach, when the microlight landed and the microlight instructor announced on the A/G frequency that he would be sending his student on his first solo flight. His student in the Kitfox remarked that there were now no other aircraft in the circuit. They reported downwind and the microlight instructor directly addressed them, saying that he intended to send his student solo once they had landed. They responded and there was a brief exchange of messages. This re-enforced the idea that there were no other aircraft in the circuit, and the Kitfox instructor asked his student to

demonstrate a glide-landing. The Kitfox instructor was taken by surprise when his student then closed the throttle on the downwind leg when just abeam the runway threshold and turned a very tight base leg, turning final at 250ft. The instructor looked to check the approach lane when on base leg, but didn't see anything to affect and so let the student continue with his unconventional approach. With hindsight, he assumed that the C152 must have been in his blind-spot above the wing. Just after they had turned final, the C152 pilot transmitted that they had cut in front of him and he was going around. The instructor noted a number of factors that he thought contributed to the Airprox: the lack of audible calls from the C152 led them to believe that there was no-one else in the circuit; because the A/G frequency was unmanned there were no responses to radio calls; the possible distraction from the microlight instructor's messages may have led his student to a sub-conscious desire to land quickly in order to allow the first solo to get airborne; and, finally, allowing his student to continue with his tight glide circuit may have placed the C152 in a blind-spot caused by the high-wing layout of the Kitfox. After landing the instructor discussed the incident with the C152 pilot.

He assessed the risk of collision as 'Medium'.

## **Factual Background**

The weather at Belfast City was recorded as follows:

METAR EGAC 111120Z 20006KT 9999 FEW011 SCT019 12/07 Q1010=

## **Analysis and Investigation**

### **UKAB Secretariat**

The incident took place at low levels in the Newtownards visual circuit and therefore did not show on the NATS radar.

The C152 and Kitfox 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>, additionally when landing:

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.

When two or more heavier-than-air aircraft are approaching an aerodrome or an operating site for the purpose of landing, aircraft at the higher level shall give way to aircraft at the lower level, but the latter shall not take advantage of this rule to cut in front of another which is in the final stages of an approach to land, or to overtake that aircraft.<sup>3</sup>

## **Summary**

An Airprox was reported when a C152 and a Kitfox flew into proximity at 1125 on Wednesday 11<sup>th</sup> November 2015. Both pilots were operating under VFR in VMC, both were listening out on the Air-to-Ground frequency and in the visual circuit at Newtownards.

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

Information available consisted only of reports from the pilots of both aircraft.

The Board first looked at the actions of the C152 pilot. Members noted that he was turning finals in the visual circuit and that he had stated that he was aware that the Kitfox was also in the circuit.

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

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

<sup>3</sup> SERA.3210 Right of Way.

Providing that the Kitfox pilot made the correct RTF calls, he would have announced that he was doing a glide circuit and would have called turning final at about the same time as the C152. Although acknowledging that he was ahead of the Kitfox, it is the nature of operations at A/G-only airfields that integration relies wholly on situational awareness gained from other pilot's radio calls and visual acquisition. If a pilot does not hear another's calls, and does not observe the other aircraft then they cannot integrate effectively. Some members wondered whether the C152 pilot might himself have been alerted by the Kitfox pilot's circuit calls that he was not aware of the C152, might have been able to see the Kitfox earlier than he did, and could therefore have taken more timely defensive avoiding action himself. That being said, there was a general recognition that the C152 pilot wouldn't have expected someone to turn in ahead when he himself had already called and become established on final. Once placed in this situation, the Board thought that his avoiding action had been the most appropriate form of action available to him, and had probably prevented the incident from being more serious than it already was.

Turning to the Kitfox pilot, members opined that he had clearly lost situational awareness on the other circuit traffic, probably during the RTF exchange when the Thruster pilot announced that he was sending his student solo. Completely unaware of the C152, the Kitfox instructor was then caught out when his student did something unexpected by turning in from the glide approach early and steeply. No doubt pre-occupied with assessing how his student was going to conduct his approach, some members thought that he should have made the student go around anyway at that point. Others thought that it was not unreasonable for him to allow the student to continue in what was, he mistakenly thought, a clear circuit in order to allow the student to learn from the steep angle of approach. Ultimately, the Board thought that he was unlucky that the C152 was in his blind spot when he had tried to clear his path visually, but wondered whether this clearing check had been rushed due to the need to monitor the student's unconventional approach.

In determining the cause of the Airprox, the Board agreed that the Kitfox pilot had not been aware of the C152 in the circuit and had therefore flown into conflict. They noted that the C152 pilot had managed to take avoiding action, albeit at a late stage, and therefore the Board assessed the risk as Category B, safety margins had been much reduced.

The Board wondered whether both pilots were making the appropriate RTF calls because neither pilot seemed to be aware of what the other was doing. However, without RTF recordings it was impossible to know. Nevertheless, the Board opined that this served to highlight the importance of accurate RTF calls in the visual circuit, especially when operating on an air-to-ground frequency where other pilots relied upon them for their self-sequencing.

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

Cause: The Kitfox pilot was not aware of the C152 ahead in the circuit and therefore flew into conflict.

Degree of Risk: B.