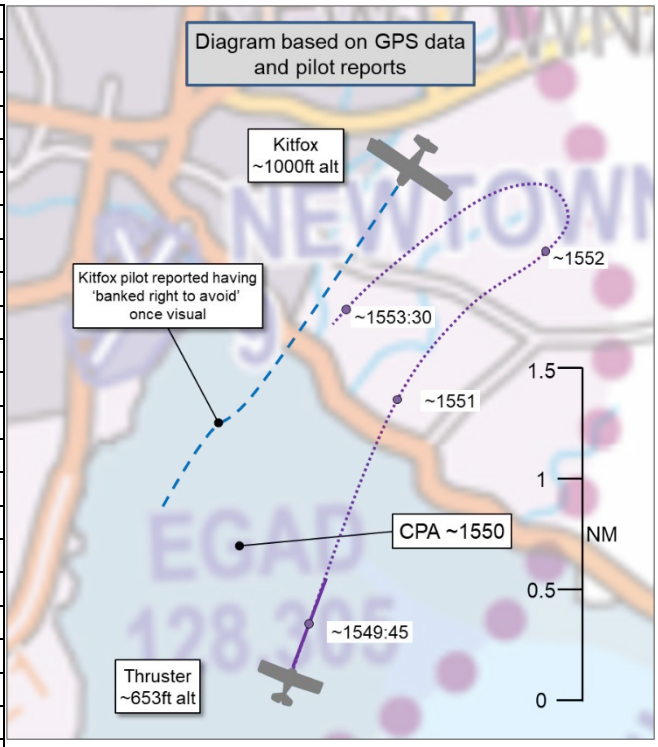
AIRPROX REPORT No 2024302

Date: 11 Dec 2024 Time: ~1550Z Position: 5433N 00541W Location: Newtownards ATZ

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Kitfox	Thruster
Operator	Civ FW	Civ FW
Airspace	Newtownards ATZ	Newtownards ATZ
Class	G	G
Rules	VFR	VFR
Service	AGCS	AGCS
Provider	Newtownards Radio	Newtownards Radio
Altitude/FL	NK	NK
Transponder	A, C, S[1]	Not fitted
Reported		
Colours	White	Yellow and green
Lighting	Navigation	Strobes
Conditions	VMC	VMC
Visibility	>10km	5-10km
Altitude/FL	1000ft	653ft
Altimeter	QNH	QFE
Heading	210°	~040°
Speed	60kt	60kt
ACAS/TAS	Not fitted	Not fitted
Separation at CPA		
Reported	NK V/NK H	~200ft V/300-400ft H
Recorded	Not Recorded	



THE KITFOX PILOT reports that [the Thruster] approached the airfield from the southwest around 1000ft towards traffic flying right downwind to RW03 with no radio communication. Once [the Kitfox pilot had] spotted [the Thruster], the [Kitfox pilot] banked right to avoid and continued to an uneventful landing. They [report that] they were able to identify the [Thruster] by its registration on the tail. They asked [the Thruster pilot] if they were on frequency and got a response that they were inbound to the aerodrome.

The pilot assessed the risk of collision as 'High'.

THE THRUSTER PILOT reports that they had been the pilot-in-command at the time of the reported [Airprox]. At the date of the incident they had [flown] a total 67 solo hours in Thrusters, of which eight were in the previous 90 days and four were in the previous 28 days. There had been no-one else on board. They were returning to Newtownards from the direction of Saintfield after a brief flight which they had cut short due to fading daylight. They made their normal approach call when passing Comber to confirm that the same runway was still in use but do not remember receiving any response to that call. As well as SkyDemon on a tablet computer, they had been also using FlightAware on a mounted mobile phone and were aware at all times of the position and height of what they now know to be the Kitfox as they had approached the control zone [sic] of the airfield from the south. They do not recall hearing any circuit radio calls from this aircraft. Because [the 2 aircraft] were approaching each other, the Thruster pilot turned right before reaching the western shore in order to maintain a safe clearance. This would have been around five minutes before they had been able to see it. It is relevant that [the Thruster] is not currently fitted with a transponder although it was decided in November to fit one in the near future. As they recall, there were no other planes in the vicinity and, as the runway in use was 03, it appeared that the Kitfox was flying on an extended downwind leg of the right hand circuit. This meant that [the Thruster pilot] could not execute a long approach to RW03 which would have been their preferred option for landing in view of the fading daylight. The runway lights had been switched on and they decided

[1] Kitfox pilot reported as having been equipped with an A/C/S transponder but the aircraft was not recorded on radar.

that, rather than perform a normal overhead join, it would be safer to land as soon as possible so they decided on a downwind leg join by flying across Strangford Lough and executing a 180° turn over the eastern shore which would put them on the downwind leg, so that they would land a few minutes after the approaching plane. [They recall that] they would have made a radio call to that effect. From FlightAware they knew that the Kitfox was approaching and had made sure to keep well to the right of it and at a lower altitude. The Thruster pilot believes that they saw it before its pilot saw them and as they passed in opposite directions it was well to their left (the Thruster pilot estimates by several hundred feet [horizontally] and also about two hundred feet above them). As they had approached each other, the [Kitfox] pilot made two radio calls to them in quick succession and the Thruster pilot responded both times that they had visual on [the Kitfox]. They do not recall any earlier or subsequent radio calls from [the Kitfox]. The Thruster pilot notes that they understand that the [Kitfox] pilot might have been startled as they would have had no transponder warning of their presence in advance of visual sighting. The strobe lights on the Thruster were switched on at all times during the flight. The flight log shows that they had descended from 1000ft to 653ft between passing Saintfield at 1539 and entering the zone at 1548, which reflected their decision to fly much lower than usual at that distance out from the airfield in order to be well below the height of the approaching aircraft as indicated by FlightAware. The Thruster pilot states that they would normally expect to enter the zone at a minimum height of 1500ft as the normal overhead join height is 1800ft, but they had been reluctant to climb to that height in view of the poor visibility (sunset that day was at 1556) and so instead had opted to fly lower. If the reported time of 1550 is accurate, when they passed each other they were just inside the southern boundary of the zone which the log shows the Thruster pilot had entered at 1548 at a height of 653ft. After they had passed, they recall having to fly a considerable distance to reach the eastern shore of Strangford Lough before executing the 180° turn. After passing the eastern shoreline they executed the turn, joined the downwind leg and landed without incident after a short final approach. As well as their actual logbook, the Thruster pilot keeps a spreadsheet copy of all hours flown with a brief note about each flight for future reference. The entry for that flight reads as follows: "*To Ballynahinch via Saintfield and home on same track. Flight time restricted due to failing light, runway lights on when landing on 03, good landing in flat calm. FlightAware on phone very useful when approaching airfield*." In retrospect, [the Thruster pilot believes that they] should probably have turned harder to the right to increase the clearance further and perhaps also made a further radio call to confirm their position a few minutes after the initial approach call. However, they had been fully aware of the position of the other plane at all times and knew that [the Thruster] height was well below it and that their track was well to the right of it. At no stage was [the Thruster pilot] concerned that there had been any risk of collision.

The pilot assessed the risk of collision as 'None'.

THE NEWTOWNARDS AGO reports that they have no record of any Airprox within their ATZ on that date and have not been informed by the pilot of either aircraft of any occurrence. [The] communication [from the UK Airprox Board] is the first and only information they had received on this matter. Consequently, they are unable to assist with enquiries into this matter.

Factual Background

The weather at Belfast City Airport was recorded as follows:

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METAR EGAC 111550Z AUTO VRB02KT 9999 OVC017 04/01 Q1035=
METAR EGAC 111520Z AUTO VRB02KT 9999 OVC017 05/01 Q1036=
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Analysis and Investigation

UKAB Secretariat

The Kitfox and Thruster pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard.[2] If the incident geometry is considered as head-on or nearly so then both pilots were required to turn to the right.[3] An aircraft

[2] (UK) SERA.3205 Proximity.
[3] (UK) SERA.3210 Right-of-way (c)(1) Approaching head-on.

operated on or in the vicinity of an aerodrome shall conform with or avoid the pattern of traffic formed by other aircraft in operation

Summary

An Airprox was reported when a Kitfox and a Thruster flew into proximity at Newtownards at approximately 1550Z on Wednesday 11th December 2024. Both pilots had been operating under VFR in VMC and in receipt of an AGCS from Newtownards Radio.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots and from the Air Ground Operator involved. 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.

The Board firstly reviewed the actions of the Kitfox pilot, noting that they had established themselves for a downwind join for RW03 and had visually acquired the Thruster as it had passed to their left-hand side, becoming concerned by its proximity (**CF6**) and making a turn to the right to increase separation from it. The Kitfox pilot reported to have made their own radio calls on approach and an additional call after having gained visual to determine the communication status of the Thruster from which they had determined that the Thruster pilot had been positioning to join the circuit. The Board agreed that, as the Kitfox pilot had carried no electronic conspicuity equipment, and had heard no radio calls from the Thruster pilot, they had gained no situational awareness of the presence of the Thruster (**CF5**).

Members secondly reviewed the actions of the Thruster pilot. They acknowledged their concerns regarding circuit traffic, the time and light levels, and the need to recover as efficiently as possible, but did consider the decision to join on the downwind side of the circuit from the opposite direction as not in compliance with the procedures as published (**CF1**) and agreed, therefore, that the Thruster pilot had not conformed with the pattern of traffic as formed (**CF3**). Members opined that perhaps a much wider berth and more gentle left turn to join at the start of the downwind leg could have offered assurance to other circuit traffic and allowed time to fully assess the status of those present (**CF2**). The Thruster pilot reported as having identified the Kitfox through onboard systems as it had proceeded downwind and had achieved and maintained visual contact with it as they had positioned to join, but members felt that the Thruster pilot had flown close enough to the Kitfox to cause that pilot some concern (**CF4**).

In reviewing the report from the Newtownards Air/Ground Operator, members noted the lack of notification by either pilot of the Airprox having taken place and recognised that there had been little else they could have offered in this case. The Board wished to remind all those involved that an Airprox reported at the time allows for pilots and Operators/Controllers to gather appropriate electronic files and other information that may help to improve understanding of the circumstances in each case.

Concluding their discussion, members noted that the Kitfox pilot had gained no situational awareness of the presence of the Thruster but had achieved visual contact, albeit much closer to their own inbound track than had felt comfortable and from the opposite direction, and the Thruster pilot reported having visually acquired the Kitfox and maintained separation as they had flown on their own track to the downwind leg. Members felt that, although safety had been degraded, both pilots had been visual with each other and that there had been no risk of collision. Risk Category C.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2024302			
CF	**Factor**	**Description**	**ECCAIRS Amplification**	**UKAB Amplification**
	Flight Elements			
	• Regulations, Processes, Procedures and Compliance			
1	Human Factors	• Use of policy/Procedures	Events involving the use of the relevant policy or procedures by flight crew	Regulations and/or procedures not complied with

	• Tactical Planning and Execution			
2	Human Factors	• Insufficient Decision/Plan	Events involving flight crew not making a sufficiently detailed decision or plan to meet the needs of the situation	Inadequate plan adaption
3	Human Factors	• Monitoring of Environment	Events involving flight crew not to appropriately monitoring the environment	Did not avoid/conform with the pattern of traffic already formed
	• Situational Awareness of the Conflicting Aircraft and Action			
4	Human Factors	• Lack of Action	Events involving flight crew not taking any action at all when they should have done so	Pilot flew close enough to cause concern despite Situational Awareness
5	Contextual	• Situational Awareness and Sensory Events	Events involving a flight crew's awareness and perception of situations	Pilot had no, late, inaccurate or only generic, Situational Awareness
	• See and Avoid			
6	Human Factors	• Perception of Visual Information	Events involving flight crew incorrectly perceiving a situation visually and then taking the wrong course of action or path of movement	Pilot was concerned by the proximity of the other aircraft

Degree of Risk: C.

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 the AGO is not required to sequence traffic in the circuit.

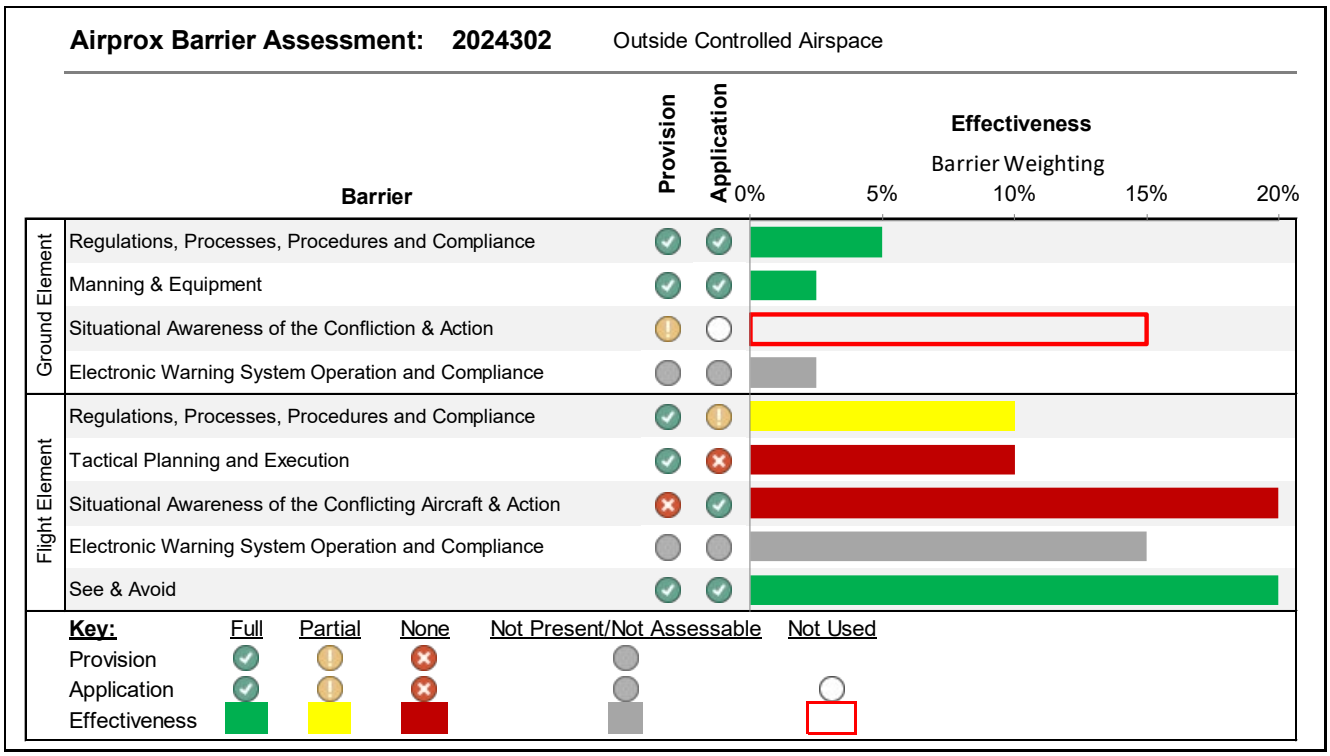
Flight Elements:

Regulations, Processes, Procedures and Compliance were assessed as **partially effective** because the Thruster pilot did not follow the standard join procedures.

Tactical Planning and Execution was assessed as **ineffective** because the Thruster pilot had made an adapted plan for arrival and did not conform with the pattern of traffic in place.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because the Kitfox pilot had no situational awareness of the proximity of the Thruster, and the Thruster pilot, having had situational awareness of the position of the Kitfox, had flown close enough to cause concern to the Kitfox pilot.

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


Airprox Barrier Assessment: 2024302
Outside Controlled Airspace
Barrier
Provision
Application
Effectiveness
Barrier Weighting
0%
5%
10%
15%
20%
Ground Element
Regulations, Processes, Procedures and Compliance
Manning & Equipment
Situational Awareness of the Confliction & Action
Electronic Warning System Operation and Compliance
Flight Element
Regulations, Processes, Procedures and Compliance
Tactical Planning and Execution
Situational Awareness of the Conflicting Aircraft & Action
Electronic Warning System Operation and Compliance
See & Avoid
Key:
Full
Partial
None
Not Present/Not Assessable
Not Used
Provision
Application
Effectiveness