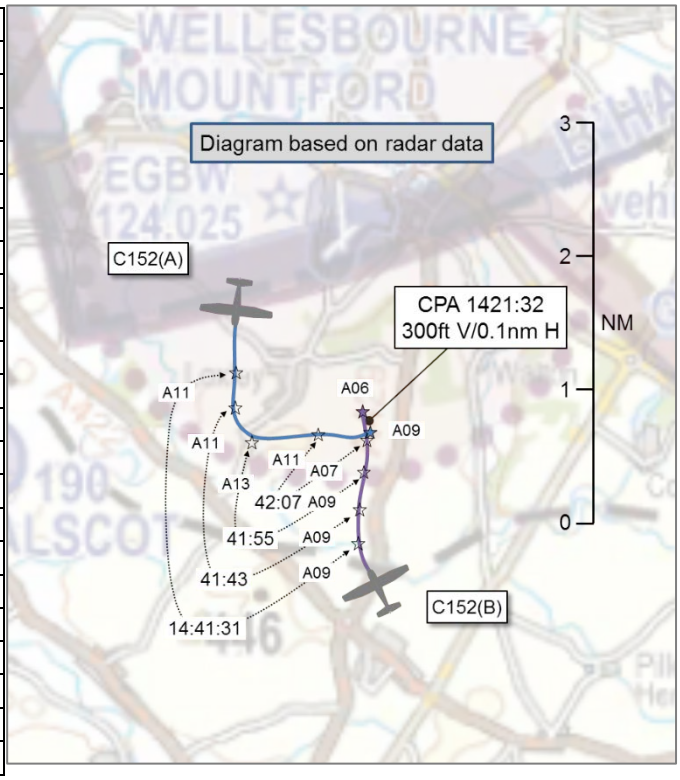
AIRPROX REPORT No 2019002

Date: 12 Jan 2019 Time: 1442Z Position: 5210N 00137W Location: Wellesbourne Mountford

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	C152(A)	C152(B)
Operator	Civ FW	Civ FW
Airspace	Well'bourne ATZ	Well'bourne ATZ
Class	G	G
Rules	VFR	VFR
Service	AFIS	AFIS
Provider	Wellesbourne	Wellesbourne
Altitude/FL	900ft	600ft
Transponder	A, C, S	A, C, S
Reported		
Colours	White, red, black	White, brown
Lighting	Beacon, landing	Beacon
Conditions	VMC	VMC
Visibility	10km	>10km
Altitude/FL	800ft	<1000ft
Altimeter	QFE (1016hPa)	QFE (1016hPa)
Heading	090°	360°
Speed	65kt	90kt
ACAS/TAS	Not fitted	Not fitted
Separation		
Reported	0ft V/100m H	Not seen at CPA
Recorded	300ft V/0.1nm H	



THE C152(A) INSTRUCTOR reports being established in the Wellesbourne 'VFR circuit pattern', left-hand for RW36 on base leg, configured for approach and descending. Shortly before turning onto final approach another aircraft was sighted, making a long straight-in approach to RW36, originating from outside the ATZ. They had been advised previously by the FISO of only two other aircraft in the circuit, one just touching down, and the other behind them on early downwind. The other aircraft was sighted on a converging flight path and, upon asking the FISO about this aircraft and their intention, the other pilot declared they wished to continue their straight-in approach and had called on a long-final previously. In fact the other pilot had previously declared they were inbound from BRUNO. The instructor kept the aircraft in sight and aimed to pass behind it and slightly to the right, which he did. A small track allowance was made for this. As they passed behind and then turned left onto a parallel descending track, their closest lateral distance at one point was just 100m. This kept them in sight at all times and positioned them for a go-around, which they did. The instructor stated that it should be noted that after a short investigation by himself after landing, he discovered that BRUNO is a fictitious waypoint and part of a so-called 'discrete procedure' for a VOR let down to Wellesbourne, based on the HON and DTY VORs. He understood this was designed as an instrument training aid for use in VMC conditions. The instructor also noted that, as he understood it, aircraft entering an ATZ must give way to existing circuit traffic, and integrate without endangering life. The pilot and instructor of the other aircraft were adamant they had seen him, but had right of way. The C152(A) instructor stated that flying a fictitious instrument approach did not give right of way over VFR traffic at a strictly VFR Airfield.

He assessed the risk of collision as 'High'.

THE C152(B) INSTRUCTOR reports returning to Wellesbourne from an instrument training session at another airfield. He elected to approach via the BRUNO reporting point, 6nm from the airfield on the extended centre-line of RW36 (the active runway). The student reported BRUNO inbound, intending to break off or continue as traffic permitted. The controller asked them to call on 'long-finals'. Accordingly, at 3nm, the student called 'three-mile finals'. Shortly afterwards they both saw a C152 aircraft in the

circuit, downwind, opposite the piano keys, and adjudged there to be no conflict with that traffic and their approach to RW36. (The student reported afterwards that he saw the traffic turning on to a base leg abeam them and again, he adjudged there to be no conflict). They were then both surprised by an R/T transmission of, 'What have we got here then? There's another aircraft on finals in front of me?' After this rather angry transmission, the student asked the other pilot 'where are you?'. The answer was 'I'm behind you' at which point the student said 'Okay we'll go round and let you go first', but the other pilot responded 'No, I'll continue turning' adding that he intended to file an Airprox. The instructor noted that the student is a PPL holder (both fixed-wing and helicopter) with over 200 flying hours in each category and was completing a course of training for the IMC rating. It would seem that the other pilot had not been aware of their presence until he saw them.

THE WELLESBOURNE AFISO reports that both aircraft were joining, as was a helicopter approaching the southeast corner, and that these were the only aircraft actively transmitting on frequency. C152(B) joined from the south after practising holds 10 miles South. The pilot was asked to report on long-final, did so, and was then asked to report on final. C152(A) came into the overhead and was asked to report downwind and did so. Immediately after this call, C152(B) pilot called 3-mile final and 'Runway 36 – land at your discretion" was called from the tower. Very soon afterwards, C152(A) (observed on base) called enquiring about another aircraft, now on short final. He was informed that this aircraft had joined on long-final from the south. The C152(A) pilot said something about being supposed to give way to circuit traffic and continued toward the final approach. He then declared an Airprox, reporting a distance of 100m. It did not look like it from the Tower, and certainly not 100m. He eventually went around. C152(B) continued on final and landed, as did C152(A) after a circuit. The Wellesbourne AFISO made the following observations:

1. He was very surprised to find C152(A) on base and halfway to the final approach when he made his call. The westerly wind would have helped him along base but he expected a much longer transit from downwind. He seemed to have travelled very quickly and not at a normal circuit speed. He had expected C152(B) to be on the ground before C152(A) reached final.
2. He expected an instructor to have had a better situational awareness in the circuit given all the radio calls to and from C152(B).
3. The pilot of C152(A) had clearly seen the aircraft on final while he was on base, hence the radio call. If there was an Airprox it was because the C152(A) continued flying towards the aircraft on final (who had priority) instead of taking avoiding action. There were no other aircraft in the circuit to hinder any manoeuvre.
4. Unusually, he did not ask the C152(A) pilot if he had copied the call from the aircraft on final. This may have been because he had only just called downwind and the AFISO therefore thought that he was well behind C152(B). The AFISO assumed that the C152(A) pilot would have heard the C152(B) final call immediately after his downwind call, and some of the other radio calls about the join on long-final. The AFSIO's attention may also have been called to the helicopter approaching the southeast corner.

Factual Background

The weather at Wellesbourne was recorded as follows:

Weather	Wx	Vis	Cloudbase	QNH	QFE
	270/9	9999	3000+	1021	1016

Analysis and Investigation

UKAB Secretariat

The C152(A) and C152(B) 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

[1] SERA.3205 Proximity..

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]. 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[3]. The Skyway Code states:

'As a general rule, joining traffic must always give way to traffic already established in the circuit[4].

Summary

An Airprox was reported when two C152s flew into proximity in the Wellesbourne Mountford visual circuit at 1442hrs on Saturday 12th January 2019. Both pilots were operating under VFR in VMC, both in receipt of an AFIS from the Wellesbourne Mountford AFISO.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings and a report from the AFISO 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.

Members first discussed the Wellesbourne Mountford 'unofficial' BRUNO approach and commented that such an arrangement could lead to misunderstanding and risk because not only would non-locally-based pilots be unaware of its existence but it seemed that some local pilots were not either (**CF1**). After further discussion members resolved to recommend that, if Wellesbourne wished to retain its use, then 'Wellesbourne Mountford update their AIP entry to reflect the BRUNO approach'. Members also discussed the Wellesbourne website information and commented that whilst the airfield AIP entry stipulated that overhead joins were preferred (EGBW AD 2.22 1a), this was not reflected on the airfield website (**CF1**). Similarly, the airfield AIP entry states, 'Pilots are requested to contact Wellesbourne at least 10 minutes before ETA Wellesbourne' (EGBW AD 2.22 2a), representing a distance of more than 10nm for all but the lightest of aircraft, yet the DOC of Wellesbourne Information is 10nm/3000ft (**CF1**). Whilst use of a designated frequency outside the DOC is not prohibited, CAP452 states:

'Reports of radio interference have been attributed to aircraft station transmissions outside the DOC of the aeronautical radio station with who they are in contact. Radio operators and WT Act Licensees should endeavour to reduce the potential for cochannel interference from aircraft station transmissions outside the DOC by ensuring that aircraft operators, airlines and pilots have access to, or are made aware of, information on frequency assignments and their DOCs for the aeronautical radio stations under their control and by refraining from calling aircraft stations where they are known to be outside the DOC unless an emergency situation exists.'[5]

'As a general rule, it rests with the aircraft station to establish communication with the aeronautical station. For this purpose, the aircraft station may call the aeronautical station only when it comes within the DOC area of the latter.'[6]

Turning to the incident itself, the Board noted that the C152(B) pilot had assessed that he was in a position to integrate with the pattern of traffic at Wellesbourne. Members discussed whether this had actually been the case and commented on the C152(A) Instructor's assertion that 'aircraft entering an ATZ must give way to existing circuit traffic'. Members recalled Airprox 2018092 in which an aircraft conducting a straight-in approach had come into conflict with an aircraft on the base leg of a visual

[2] SERA.3225 Operation on and in the Vicinity of an Aerodrome.
[3] SERA.3210 Right-of-way, Landing.
[4] CAP1535S, The Skyway Code, Aerodrome Operations, Arrival and departure procedures, General circuit guidance, pg 92.
[5] CAP 452 (Aeronautical Radio Station Operator's Guide) Chapter 1 (Aeronautical radio stations), Frequency assignments and designated operational coverage, page 18.
[6] CAP 452 (Aeronautical Radio Station Operator's Guide) Chapter 2 (Communications techniques, procedures and phraseology), General communication procedure, page 19.

circuit. In the discussions for that Airprox it was established that potential ambiguity existed in that the pilot of an aircraft conducting a straight-in approach is required to conform with the pattern of traffic already established in the visual circuit and the pilots of aircraft in the visual circuit are required to give way to traffic 'in the final stages of an approach to land'. Members agreed that in their opinion the C152(A) instructor was incorrect in his assertion, and that it was for both pilots to integrate mutually within the visual circuit. Members also agreed that the Skyway Code advice that, 'As a general rule, joining traffic must always give way to traffic already established in the circuit.' was pragmatic but was a 'general rule' which did not override the provisions of SERA and that, as ever, communication and consideration were key to effective and safe operation. In that regard, the C152(A) instructor had seen the C152(B) on final approach but had chosen to fly into close proximity with it (**CF2**, **CF4**, **CF6**). Members were unanimous in their opinion that this was not a wise course of action and that the C152(A) instructor appeared to have let frustration, based on a mistaken premise, get the better of him (**CF3**).

The Board further discussed integration of joining traffic and agreed that the C152(B) pilot also had a duty to integrate with C152(A), which the C152(B) student had seen turning onto base leg and had adjudged there to be no conflict. Notwithstanding the fact that SERA.3210 requires the aircraft at the higher level to give way to the aircraft at the lower level if both are intending to land, the circumstances of this incident were such that there was a degree of ambiguity. In that respect, it appeared to the Board that, ultimately, neither pilot had sufficiently integrated with the other (**CF5**).

Discussing the risk, members agreed that the C152(A) instructor had remained visual with the C152(B) throughout and therefore that risk of collision had been averted. However, members also agreed that safety had been reduced because the C152(A) instructor did not know what the other pilot might do as he flew towards him; a better course of action may have been to extend downwind or go-around at circuit height, and to discuss the incident on the ground rather than make comment on the radio.

PART C: ASSESSMENT OF CAUSE AND RISK

Contributory Factors:

CF	Factor	Description	Amplification
	Ground Elements		
	• Regulations, Processes, Procedures and Compliance		
1	Organisational	• Organisational Documentation and Publications	Inadequate regulations or procedures
	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	• Insufficient Decision/Plan	Inadequate plan adaption
	• Situational Awareness of the Conflicting Aircraft and Action		
4	Human Factors	• Lack of Action	Pilot flew into conflict despite Situational Awareness
5	Human Factors	• Monitoring of Other Aircraft	Pilot did not sufficiently integrate with the other aircraft
	• See and Avoid		
6	Human Factors	• Lack of Action	Pilot flew into conflict

Degree of Risk: C.

Recommendation: Wellesbourne Mountford update their AIP entry to reflect the BRUNO approach.

Safety Barrier Assessment[7]

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

Ground Elements:

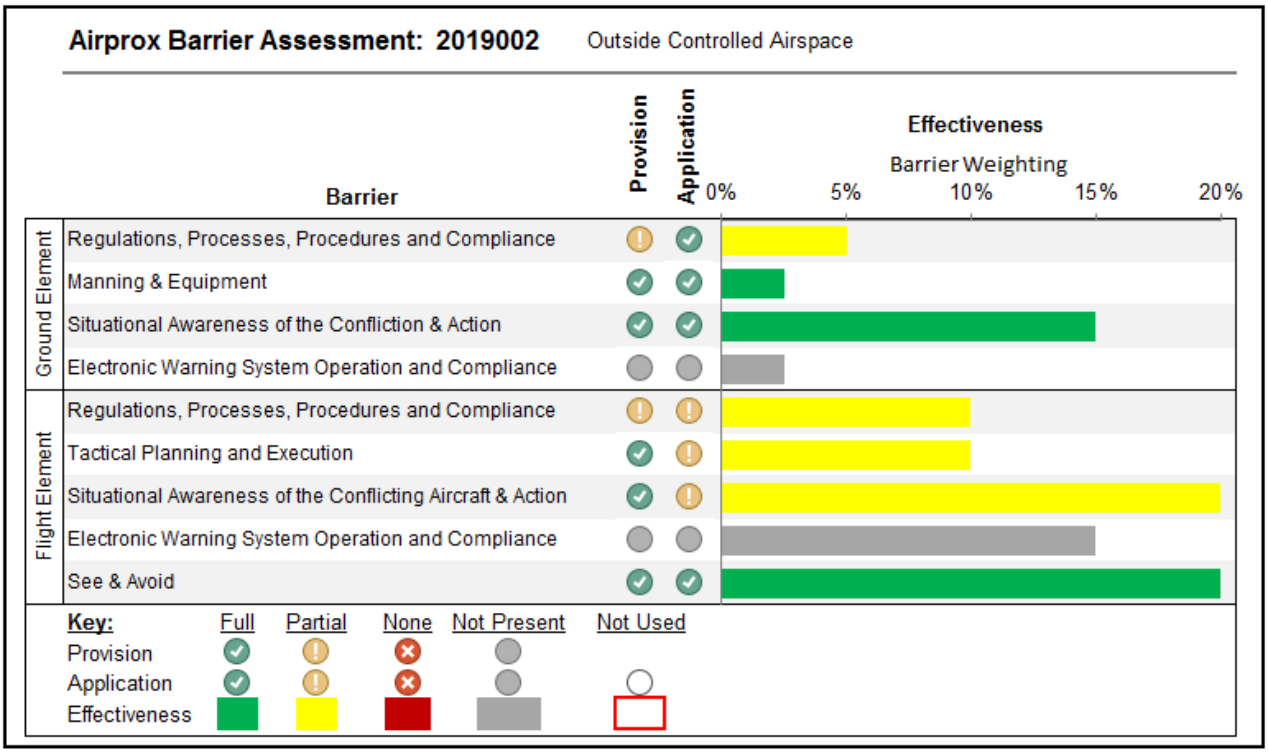
Regulations, Processes, Procedures and Compliance were assessed as **partially effective** because the AIP join and 'BRUNO' procedures were lacking in some respects.

Flight Elements:

Regulations, Processes, Procedures and Compliance were assessed as **partially effective** because neither pilot integrated fully effectively and so two aircraft flew into conflict.

Tactical Planning and Execution was assessed as **partially effective** because either pilot could have modified their circuit when it became clear that there was a confliction.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **partially effective** because although the C152(A) pilot was aware of (and had seen) the C152(B), he flew towards it to a self-reported separation of 100m.



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