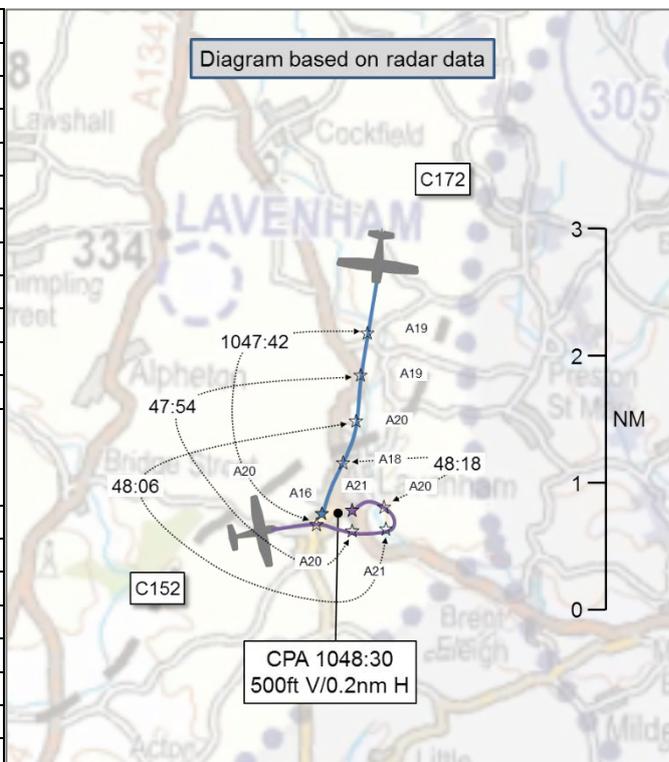


AIRPROX REPORT No 2019228

Date: 02 Aug 2019 Time: 1048Z Position: 5206N 00048E Location: 1nm S Lavenham

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	C172	C152
Operator	Civ FW	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Basic	Basic
Provider	Wattisham	Wattisham
Altitude/FL	1600ft	2100ft
Transponder	A,C,S	A,C
Reported		
Colours	Mainly white	White, maroon
Lighting	Anti-collision, wing-tip strobes, landing	Beacon, strobe, nav
Conditions	VMC	VMC
Visibility	NK	NK
Altitude/FL	1900ft	NK
Altimeter	QNH (1018hPa)	NK
Heading	186°	NK
Speed	105kt	90kt
ACAS/TAS	Not fitted	Not fitted
Separation		
Reported	Not reported	Not seen
Recorded	500ft V/0.2nm H	



THE CESSNA 172 PILOT reports that although he had spoken previously to London Information and had opened his flight plan to Le Touquet with them, he had selected an ATS from Wattisham because he wanted to be in contact enroute with local ATSS until the South Coast and then return back to London Information. Also he intended to cross the Wattisham MATZ. Heading south from Little Snoring to Southend he contacted RAF Wattisham for a Basic Service and MATZ penetration. He was informed of gliding activity and heard ATC talking to a student pilot. Soon after, and approximately one mile north of Lavenham, he saw an aircraft flying from his right to left on a straight track, similar height, possibly slightly higher. At this stage he did not believe safety was compromised because the aircraft was not in close proximity and, because of its track, he would be well behind it. He maintained visual contact with the aircraft. The aircraft then made what looked like a 90° right turn [actually a left turn] towards his direction but parallel. He altered track slightly to his right. He was then aware of the other aircraft heading towards him. He made a rapid descent and rolled his wings slightly to make movement for the other pilot to see. He did not turn left as the aircraft came towards him because this would have been towards the other aircraft. Neither did he carry out an immediate right turn because he would have lost sight of the other aircraft and it had appeared it was heading towards him. He did not know if the other pilot had seen him prior to or during his turn. He did not climb as he was in a relatively low performance aircraft. He advised ATC there had been an Airprox and asked what track the other aircraft was currently on (he had lost sight) so he could take any necessary action. He heard the other pilot saying words to the effect that he was on top of or overhead his aircraft. This could have meant a reasonable separation, he was unaware at the time of the distance. On reflecting on this incident he had time to call ATC and say he was visual with another aircraft moving right to left but away from him. He did not because it was moving away from him and his track was well behind it. He did not know if it was the student pilot's aircraft, it could have been another aircraft and he did not recollect ATC telling him about an aircraft moving right to left. He was aware that with a Basic Service ATC did not have to tell him of other traffic but believed that he had been passed information on the other aircraft but after he had already seen it.

With hindsight he would have called because a student pilot was in the area and to have done so would have assisted in his situational awareness of other traffic. GA R/T traffic was not heavy at the time. He would also have altered course more significantly to his right to create more distance behind the other aircraft as it crossed his right to left because it was not always correct to assume an aircraft travelling right to left (or vice versa) was going to continue on a straight course. He added that the distances quoted in his description of events might not be entirely reliable. He was not distracted by anything, including his passengers at the time. They were assisting in the look-out. The pilot submitted a copy of his pilot log for that portion of his flight (Figure 1).

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

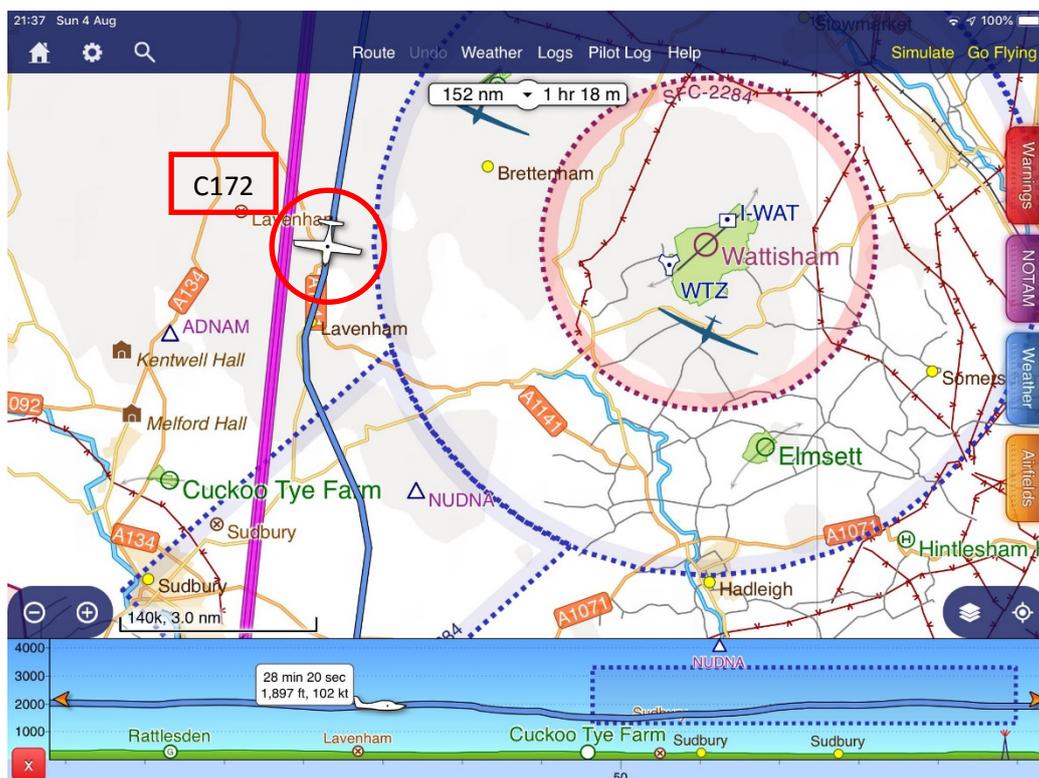


Figure 1. C172 pilot log.

THE CESSNA152 PILOT reports that he was on a student-flight in contact with Wattisham Approach. He turned at Lavenham. He remembered Wattisham advising another pilot of his presence. The other pilot acknowledged and advised he was turning west, back to his original heading. The student pilot advised Wattisham that he had visual contact [this was a different aircraft to the C172], which they acknowledged. At no time did he feel, nor was he advised by Wattisham of any issues or conflict of airspace.

The pilot did not report his assessment of the risk of a collision.

THE WATTISHAM APPROACH RADAR CONTROLLER reports that at 1036 the C172 pilot called requesting a Basic Service. He gave a Basic Service and allocated squawk 4512 which he verified and validated the Mode C at 1800ft on QNH 1018hPa. At 1038, the C152 student pilot contacted him, passed details of his flight routing via Lavenham, and requested a Basic Service. He gave a Basic Service and allocated 4513 which he verified and validated the Mode C at 2000ft. At approximately 1047 he issued Traffic Information to another pilot on his frequency, who was in receipt of a Traffic Service, about multiple contacts. He then noticed that the 4512 and 4513 squawks were within 1nm of each other to the north of Lavenham. At that point the processed labels were garbling and only one Mode C was showing indicating 1400ft. He called generic Traffic Information to the C172 pilot on a C152 to the south possibly at a similar level. The C172 pilot stated he had been visual and wished to file an Airprox. At that point both Mode Cs appeared indicating the C172 at 1500ft and the C152 at

2000ft. The C172 was transferred at 1052 and the C152 at 10.59. The C172 pilot called back later via landline to explain that he had been aware that there was a student pilot on frequency and that he was aware that it was in his vicinity. Whilst he was issuing the Traffic Information to the C172 pilot he had the C152 in sight passing right to left at a similar level. This was at the time that the processed labels were garbling; he stated he had still been at 1800ft. He then stated that as the C152 passed his 12 o'clock, it began a left turn towards him. As it turned he lost sight of the aircraft and so he descended to 1500ft. It was at this point that the C172 pilot reported that he wished to file an Airprox but that he appreciated the information that he had passed him.

Factual Background

The weather at Wattisham was recorded as follows:

METAR EGUW 021050Z 01011KT 9999 SCT 035 22/12/ Q1018 NOSIG RMK BLU BLU=

Analysis and Investigation

UKAB Secretariat

The C172 and C152 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard¹.

Summary

An Airprox was reported when a C172 and a C152 flew into proximity near Wattisham at 1048hrs on Friday 2nd August 2019. Both pilots were operating under VFR in VMC, both in receipt of a Basic Service from Wattisham Radar.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilots, the controllers, and area radar recordings. 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 noted that the C172 pilot had initially seen the C152 crossing ahead of his track from right to left at a similar height, but not in close proximity, and gauged that he would pass behind it. After the C152 had passed ahead, its pilot had unexpectedly made a left turn heading towards him and so he had made a rapid descent and had rolled his wings slightly to make movement for the other pilot to see his aircraft. However, this was unsuccessful because the C152 pilot did not see the C172 (**CF5**). Civil GA Pilot members commented that the C152 pilot should have cleared his new flightpath before making his turn and wondered if his attention had been concentrated on looking down to judge his turning point at Lavenham (**CF4**).

The Wattisham controller was providing only a Basic Service to both pilots and was therefore not mandated to monitor either flight (**CF1**). The NATS advisor commented that, at the time there were 8 pilots on the frequency in receipt of a Basic Service and 1 in receipt of a Traffic Service. The controller had just passed Traffic Information to the pilot in receipt of a Traffic Service when he noticed the close proximity of the subject aircraft. He then passed Traffic Information to the C172 pilot, but this was after the C172 pilot had already seen the C152, at about the time of CPA.

The Board considered that both pilots would have been better served by requesting a Traffic Service from Wattisham (**CF2**), thereby providing an opportunity to have improved their SA at an earlier point. This would potentially have assisted the C172 pilot to make an earlier deviation from his route in giving way to the C152 as it initially flew across his nose. That being said, members acknowledged that he had seen the C152 before it crossed in front and had considered that there was sufficient separation

¹ SERA.3205 Proximity.

for him to pass behind. Had the C152 pilot been in receipt of a Traffic Service then they would probably have been informed about the presence of the C172, of which they were unaware (**CF3**) and would not have turned towards it.

Turning to the risk, the Board noted that although the C152 pilot had not seen the C172, the pilot of the latter aircraft had kept the C152 in sight throughout and had taken effective action to avoid it once its pilot unexpectedly turned towards. Consequently, at CPA the two aircraft had been 600ft vertically apart and, although the Board agreed that safety had been degraded, they concluded that there had not been a risk of a collision. Accordingly, the Airprox was assessed as risk Category C.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

2019228			
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			
• Tactical Planning and Execution			
2	Human Factors	• Communications by Flight Crew with ANS	Apt ATS not requested by pilot
• Situational Awareness of the Conflicting Aircraft and Action			
3	Contextual	• Situational Awareness and Sensory Events	Generic, late, no or incorrect Situational Awareness
• See and Avoid			
4	Human Factors	• Distraction - Job Related	Pilot looking elsewhere
5	Human Factors	• Monitoring of Other Aircraft	Non-sighting or effectively a non-sighting by one or both pilots

Risk of collision: C

Safety Barrier Assessment²

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

Flight Elements:

Tactical Planning and Execution was assessed as **partially effective** because both pilots could have requested a Traffic Service from Wattisham.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because neither pilot had any situational awareness of the other until the C172 pilot saw the C152.

² 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: 2019228		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							