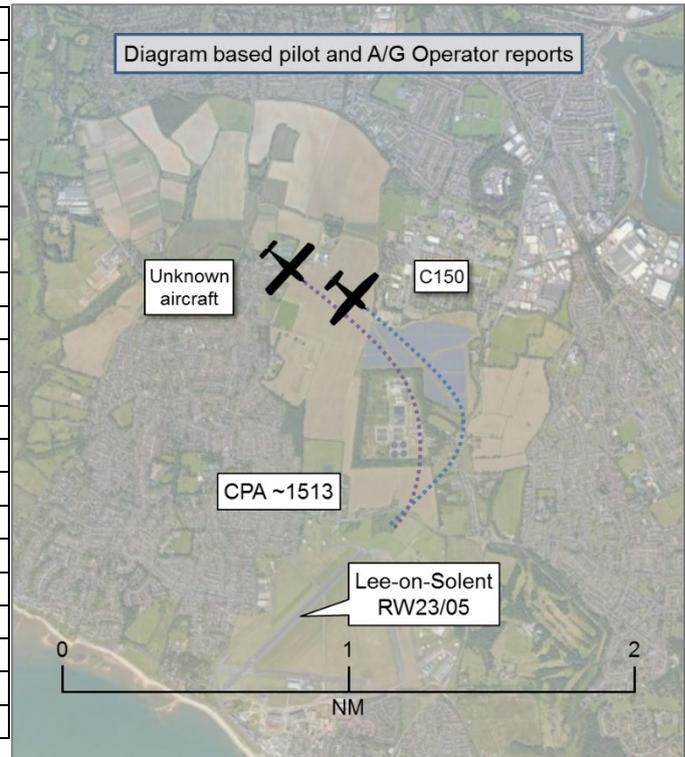


AIRPROX REPORT No 2018021

Date: 12 Feb 2018 Time: ~1515Z Position: 5049N 00112W Location: Lee-on-Solent

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	C150	Light Aircraft
Operator	Civ Pte	Unknown
Airspace	Lee ATZ	Lee ATZ
Class	G	G
Rules	VFR	VFR
Service	AGCS	AGCS
Provider	Lee Radio	Lee Radio
Altitude/FL	NK	NK
Transponder	A, C	
Reported		Not reported
Colours	White, blue	
Lighting	Strobe, landing	
Conditions	VMC	
Visibility	'Good'	
Altitude/FL	600ft	
Altimeter	NK (1014hPa)	
Heading	230°	
Speed	75kt	
ACAS/TAS	Not fitted	
Reported	0ft V/45m H	
Recorded	NK	



THE C150 PILOT reports being on final approach for RW23 when she heard an R/T transmission from another pilot saying that another aircraft was on final with her. She looked left to see a low-wing single-engine aircraft descending and flying parallel with her. She made an orbit to the right to avoid conflict. The C150 pilot noted that no recent calls had been made by this pilot to alert her of his position and that earlier, when she had first gone over to Lee Radio (when over Cowes) she had heard a pilot say he was lost and had thought he was 'at Lee but was actually over Fleetlands'. He had sounded confused, so she and her passenger looked out for him before arriving in the Lee circuit area. They did not hear any other calls from the other pilot to suggest he was still heading for Lee. The C150 pilot commented that another aircraft had landed ahead of her while she was downwind and that she had made all the usual visual circuit R/T calls.

She assessed the risk of collision as 'Medium'.

THE UNKNOWN LIGHT AIRCRAFT: The visual circuit at Lee-on-Solent was occupied at the time by 3 other aircraft in addition to the C150. None of the pilots of those aircraft recalled flying in proximity to a C150 on final approach.

THE LEE ON SOLENT AGCS OPERATOR (AGO) reports that a TB20 joined the circuit downwind. The AGO informed the pilots of the three other aircraft in the circuit. The TB20 pilot flew a circuit pattern which was much wider and further north than usual, so he was reminded to avoid Fleetlands [ATZ], which is also to the north. When the TB20 pilot reported his position as 'on final', the AGO informed the three pilots in the circuit and all three informed him that they were not visual and would conduct an orbit in their current positions: one aircraft at the end of base leg; another at the start of base leg; and another mid-downwind. This gave the TB20 pilot enough time to make a final approach but it was apparent that he was in a poor position and he decided to go-around, the AGO believed to make another approach [in fact the TB20 pilot turned downwind and departed the circuit to the north and east]. Once reported going around, the other pilots repositioned themselves and proceeded to either land or conduct a touch-and-go. The AGO recalled that an aircraft which he believed to be the TB20 then conducted a much

closer circuit which appeared to be slightly shorter than usual. This aircraft was catching up with the aircraft ahead and, when its pilot reported downwind, the other aircraft was on base leg ahead. The aircraft turned on to base leg and was informed that there was one aircraft ahead, turning final. The aircraft also turned final but seemed to turn far too early, coming onto final approach from an angle instead of straight ahead, and didn't straighten up until on short final. At this stage side-by-side with the aircraft which had been ahead. The pilot of the aircraft on final, which had been ahead, asked Lee Radio what the intention was of the other pilot and then decided to break away from the final approach, climbing and altering course to the right.

Factual Background

The weather at Southampton was recorded as follows:

METAR EGGH 121520Z 23010KT 9999 FEW030 06/M03 Q1014=

Analysis and Investigation

UKAB Secretariat

The C150 and unknown aircraft pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard¹. 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 operation². The UKAB received a completed Airprox Report Form from the TB20 pilot in addition to a GPS track log of his flight. It was apparent from this log that he was not in proximity with the C150.

Summary

An Airprox was reported when a C150 and an unknown light aircraft flew into proximity at about 1515 on Monday 12th February 2018. Both pilots were operating under VFR in VMC, both in receipt of an AGCS from Lee Radio.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of a report from the C150 pilot and a report from the A/G Operator.

The Board first discussed the pilots' actions. The C150 pilot was established in the visual circuit for RW23 at Lee-on-Solent and reported being warned of the other aircraft in proximity by an R/T call. She looked left, saw the other aircraft and sensibly increased separation by turning away, to the right. The A/G Operator's report indicated that it was the TB20 that flew into proximity with the C150 but the TB20 pilot's GPS track log showed that this could not have been the case. Whichever the other aircraft was, the A/G Operator recalled that its pilot appeared to have cut short on the base to final turn and hence flew into proximity with the C150. Board members spent some time discussing the various reports and could only conclude that the TB20 pilot's irregular approach and the Airprox appeared to have been conflated. It was felt that this was understandable, given the complexity of the visual circuit at the time. What was certain, however, was that the pilot of the unknown aircraft had not integrated with the C150 and had caught up when previously behind in the visual circuit. To appear to the left of the C150 on finals having been behind it downwind, the unknown pilot must have crossed its flight-path at some stage but the C150 pilot was not visual with the other aircraft prior to CPA and presumably the unknown aircraft pilot did not fly into such a position whilst being visual with the C150; accordingly, members felt that safety had been much reduced.

¹ SERA.3205 Proximity.

² SERA.3225 Operation on and in the Vicinity of an Aerodrome.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: The unknown aircraft pilot did not integrate with the C150.

Degree of Risk: B.

Safety Barrier Assessment³

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

ANSP:

Situational Awareness and Action were assessed as **not used** because although the AGO was aware of the aircrafts' positions, he was not required to take action.

Flight Crew:

Regulations, Processes, Procedures, Instructions and Compliance were assessed as **ineffective** because the unknown pilot did not integrate with the pattern of traffic in the Lee-on-Solent visual circuit.

Tactical Planning was assessed as **ineffective** because the unknown pilot did not maintain appropriate spacing on the C150.

Situational Awareness and Action were assessed as **ineffective** because neither pilot was aware of the proximity of the other until close to or at CPA.

See and Avoid were assessed as **ineffective** because the unknown pilot evidently did not see the C150 and the C150 pilot only saw the other aircraft at about CPA.

Airprox Barrier Assessment: 2018021 Outside Controlled Airspace				Effectiveness				
Barrier		Availability	Functionality	Barrier Weighting				
				0%	5%	10%	15%	20%
ANSP	Regulations, Processes, Procedures & Compliance	●	●	[Green bar to 5%]				
	Manning & Equipment	●	●	[Green bar to 5%]				
	Situational Awareness & Action	●	●	[Red box from 0% to 15%]				
	Warning System Operation & Compliance	●	●	[Grey bar to 5%]				
Flight Crew	Regulations, Processes, Procedures, Instructions & Compliance	●	●	[Red bar to 10%]				
	Tactical Planning	●	●	[Red bar to 10%]				
	Situational Awareness & Action	●	●	[Red bar to 20%]				
	Warning System Operation & Compliance	●	●	[Grey bar to 15%]				
	See & Avoid	●	●	[Red bar to 20%]				

Key:

Availability	Fully Available	Partially Available	Not Available	Not Present
Functionality	Fully Functional	Partially Functional	Non Functional	Present but Not Used, or N/A
Effectiveness	Effective	Partially Effective	Ineffective	Not present Not Used

³ The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).