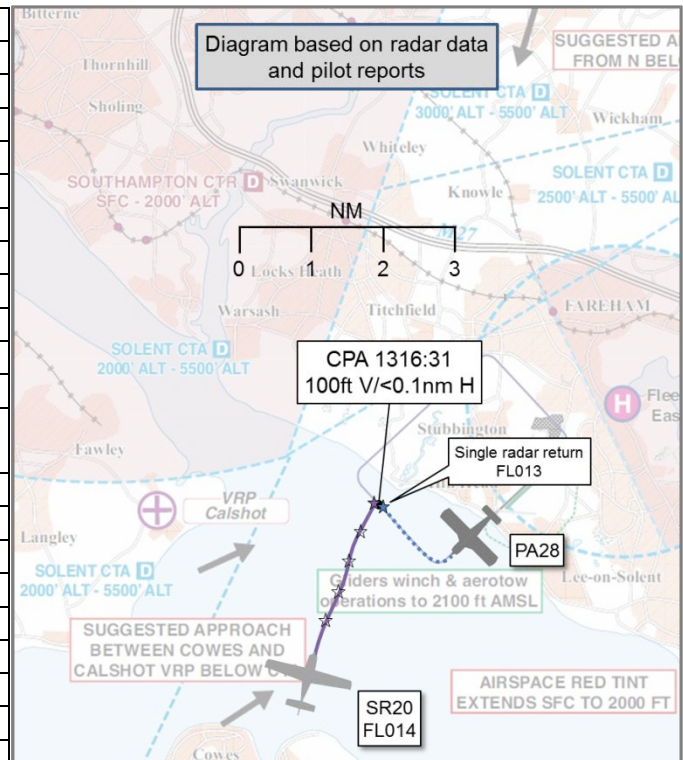


AIRPROX REPORT No 2015194

Date: 28 Oct 2015 Time: 1317Z Position: 5048N 00115W Location: Lee on Solent ATZ

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	PA28	SR20
Operator	Civ Trg	Civ Pte
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	AGCS	AGCS
Provider	Lee Radio	Lee Radio
Altitude/FL	FL014	FL013
Transponder	A, C, S	A, C
Reported		
Colours	Cream, blue	White
Lighting	Strobes, beacon, landing	Strobes, landing, wing, nav
Conditions	VMC	VMC
Visibility	10km	10km
Altitude/FL	1000ft	1000ft
Altimeter	QFE (1006hPa)	QFE (1006hPa)
Heading	320°	050°
Speed	90kt	95kt
ACAS/TAS	Not fitted	TAS
Alert	N/A	TA
Separation		
Reported	50ft V/50m H	50ft V/50m H
Recorded	100ft V/<0.1nm H	



THE PA28 PILOT reports conducting a mutual circuit-training exercise as part of the Flight Instructor course syllabus as PF, seated in the right-hand seat. They were established in the circuit, climbing out on the crosswind leg on the third of three circuits, about to level off at circuit height, when he observed another aircraft closing rapidly from the left at close range, about 100-150ft away. He took immediate avoiding action by rolling the aircraft hard left because he considered there was a real risk of collision. As he took avoiding action the pilot of the other aircraft broke off his radio call of "joining downwind", possibly because he also had just become aware of the proximity of the two aircraft.

He assessed the risk of collision as 'High'.

THE SR20 PILOT reports approaching Lee on Solent from the west to line-up with the downwind leg [for RW23] straight and level approximately abeam Cowes; he did not fly any further east than the downwind leg position. He did not hear any radio calls from the other aircraft, which converged from the right and carried out a left avoidance roll. The pilot commented that his TAS audio alarm sounded 'Traffic one o'clock low, less than one mile'.

He assessed the risk of collision as 'Medium'.

THE A/G OPERATOR reports he had one aircraft in the circuit, the PA28, conducting touch-and-go's. The SR20 pilot called for joining information, stating that he was over Cowes. The A/G Operator gave the pilot the relevant Information, which included QFE, runway in use and circuit traffic. At about 1315 the SR20 pilot called and said he was positioned downwind. The A/G Operator was not visual with the aircraft downwind, however he was visual with one aircraft which appeared to be orbiting out of the way of another where the crosswind and downwind legs meet. The PA28 pilot last reported final for touch and go and did not report crosswind.

THE AIRFIELD GENERAL MANAGER reports he witnessed the event, noting 2 aircraft on an intercept heading, and that the aircraft on crosswind took avoiding action. He kindly provided the diagram background map for this report, which appears on the airfield website page 'Visiting by Air'¹.

Factual Background

The weather at Southampton was recorded as follows:

METAR ECHI 281320Z VRB02KT 9999 FEW023 SCT035 15/10 Q1007

Analysis and Investigation

UKAB Secretariat

The PA28 and SR20 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard². 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 operation³. The UK AIP entry for Lee on Solent states:

'Use of Runways

(a) Due to gliding operations all aircraft to join downwind.'⁴

...

'Circuits

(a) Circuits – Main Runways 05/23

(i) Suggested join is left base for Runway 05 or downwind for Runway 23. ...

(ii) Circuits at 1000 ft aal. ... and powered circuits to the north, LH on Runway 05 and RH on Runway 23.

(b) ...

(c) No dead-side, overhead or crosswind joins.'⁵

Comments

PA28 Operating Company

The reporting pilot and passenger advised the company's nominated Accountable Manager of the incident immediately after landing and, after further discussion with the operator and airfield management, it was decided that an Airprox be raised. The incident was also logged in the company safety reporting system for discussion by the safety committee and the airfield management team.

Summary

An Airprox was reported when a PA28 and a SR20 flew into proximity at 1317 on Wednesday 28th October 2015. Both pilots were operating under VFR in VMC, both in receipt of an AGCS from Lee Radio.

¹ <http://www.daedalusairfield.co.uk/visit-by-air>

² SERA.3205 Proximity.

³ SERA.3225 Operation on and in the Vicinity of an Aerodrome.

⁴ EGHF AD 2.20 LOCAL TRAFFIC REGULATIONS, AD 2.EGHF-5, paragraph 6, dated 25 Jun 2015.

⁵ EGHF AD 2.22 FLIGHT PROCEDURES, AD 2.EGHF-6, paragraph 1, dated 23 Jul 2015.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings, a report from the A/G Operator and a report from an appropriate operating authority.

Members noted that aircraft joining the circuit at Lee on Solent were obliged not to join deadside, overhead or crosswind due to potential gliding activity, and that, whilst this was not an uncommon restriction, it did place an increased need for vigilance when joining in order to be able to integrate effectively with traffic already operating in the visual circuit. The Board noted that the SR20 pilot had been passed airfield details and was informed of traffic in the visual circuit for RW23 (for which the suggested join was downwind). Wondering how joining pilots might be further helped in their task of sighting other aircraft in the circuit, a discussion ensued regarding the A/G Operator's report that the PA28 pilot's last transmission had been to call final (although the SR20 pilot reported that he did not hear any transmissions from another aircraft). Given the likelihood of traffic joining downwind, some members wondered whether pilots in the circuit in such circumstances might be better placed by additionally reporting crosswind at Lee on Solent, thereby potentially affording a useful increase in situational awareness for joining pilots. The counter argument was that this would result in more RTF transmissions thereby occupying the frequency; other members opined that if the SR20 pilot was not sure of the PA28's position as he approached downwind, all he had to do was either to ask for a position report (which would have allowed him to have taken earlier avoiding action) or orbit before he reached the downwind position until he was sure he had sighted all the aircraft in the circuit. It was a finely balanced argument, but a crosswind call might be considered valuable at Lee on Solent given that the preferred join for RW23 was from downwind. The Board also noted that the SR20 pilot had received an alarm from his on-board TAS, and wondered what it had been indicating beforehand; if the SR20 pilot had been able to include the TAS display in his scan during his join, then he might have gained situational awareness which would have enabled him to take earlier, and hence more effective, avoiding action.

Turning to the cause and risk in the incident, it appeared that both pilots saw each other and took avoiding action at about the same time. The Board agreed that the onus was on the SR20 pilot to integrate with the pattern of traffic in the visual circuit, and that in this case safety margins had been much reduced.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: The SR20 pilot did not integrate effectively with the PA28 in the visual circuit.

Degree of Risk: B.