## AIRPROX REPORT No 2018006

Date: 10 Jan 2018 Time: 1446Z Position: 5049N 00112W Location: Lee-on-Solent ATZ

Recorded	Aircraft 1	Aircraft 2	
Aircraft	DA42	ASK8	Diagram based on radar data and pilot reports
Operator	Civ Trg	Civ Club	
Airspace	Lee on Solent	Lee on Solent	
-	ATZ	ATZ	
Class	G	G	P Solo AFAR HANK
Rules	VFR	VFR	
Service	AGCS	AGCS	
Provider	Lee Radio	Lee Radio	ELECTION ELECTION
Altitude/FL			45:15 A07
Transponder	A, C, S	Not fitted	DA42
Reported			45:27 A06
Colours	White	White, blue	
Lighting	White strobes	Not fitted	1446:03 NMC ¥ 45:39 A05
Conditions	VMC	VMC	
Visibility	10km	10nm	CPA ~1446
Altitude/FL	700ft	400ft	
Altimeter	NK	QFE (NK hPa)	- 29
Heading	240°	320°	
Speed	90kt	50kt	
ACAS/TAS	Not fitted	Not fitted	
Separation			
Reported	500ft V/0.4nm H	NK V/400m H	
Recorded	ded NK		

# PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

**THE DA42 INSTRUCTOR** reports that he was conducting circuit training to RW23RH at Lee-on-Solent with a glider in the LH glider circuit. On turning onto final, the glider crossed the centre line about ½nm ahead, causing his student to go-round. The glider turned to land on the RHS of the runway as they climbed to its left and about 500ft above.

He assessed the risk of collision as 'Low'.

**THE ASK8 PILOT** reports that he took the last flight of the day, with the intention of landing at the hangar. He was winch-launched to about 1100ft, released the cable, and turned left away from the runway. He soared for a few minutes with no lift, and joined the usual left-hand circuit late downwind. He called 'downwind 23 left-hand [ASK8 C/S]' (acknowledged by Lee Radio) not specifying which side. He then saw an aircraft on base at some distance and so made another R/T call 'crossing the extended centre-line to land grass-right [ASK8 C/S]", (again acknowledged by Lee Radio). He then called 'final [ASK8 C/S]'. The pilot noted that Lee Radio did not inform him of any conflicting traffic at any time during the flight, and he was not aware of any prior call from the DA42. The pilot then heard a 'going around' call followed by a tower call like 'apologies glider on final'. The rest of the circuit went smoothly with a hangar landing as intended, grass-right.

He assessed the risk of collision as 'Low'.

**THE LEE-ON-SOLENT A/G OPERATOR** reports that the DA42 pilot had established final approach for a touch-and-go, and reported this to Lee Radio. The call was acknowledged, and the surface wind was passed. Shortly after this, the ASK8 pilot, on base leg, called Lee radio and stated that he was crossing the runway centreline and turning final. At this point, the aircraft had already passed the centreline and then made an approach to the grass to the western side of the active RWY23. The radio operator informed the DA42 pilot on final approach that a glider was crossing the centreline in front of

them, although at this point the glider had already done so. The DA42 pilot acknowledged the call, aborted their final approach and reported that they would go around. Local glider protocol states that aircraft must not cross the extended centreline into the powered circuit when there are powered aircraft on final approach. The glider pilot ignored this local rule.

### Factual Background

The weather at Southampton was recorded as follows:

METAR EGHI 101450Z 27002KT 9999 FEW020 09/05 Q1005=

### Analysis and Investigation

### **UKAB Secretariat**

The DA42 and ASK8 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard<sup>1</sup>. 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 operation<sup>2</sup>. The UK AIP entry for Lee-on-Solent states as follows:

'Be aware that gliders approach from the opposite direction on base leg. They will normally be lower than powered aircraft and have priority.'<sup>3</sup>

SERA.3210 Right-of-way states as follows:

(4) Landing. 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.

(i) 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. Nevertheless, power-driven heavier-than-air aircraft shall give way to sailplanes.'

### Comments

**The DA42 Operating Company Flight Safety Officer** reports that the DA42 student was making an approach for a touch-and-go as cleared by Lee Radio. He was expecting the glider to land on the left side of the runaway in accordance with Lee-on-Solent rules. However, the glider crossed over the runway to the right, in front of the aircraft, so forcing a go-around.

The Gliding Club CFI reports that current [gliding club] operating procedures state the following:

'10.2.2 Circuit Integration

Gliders should not routinely cross the centre line. Crossing of the centreline may be permitted if the Glider is returning to the hangar and if it is safe to do so. Gliders should call Lee Radio to establish if there is any other conflicting circuit traffic. At no time should a glider cross the centreline with an aircraft established on Final. All pilots should be briefed on this if returning to the hangar. Intentions must be broadcasted to Lee Radio or if the tower unmanned to Lee Traffic. If there is an aircraft on Final the glider shall not cross the centreline but shall land on the glider strip. Great care should be taken to look out for power traffic once on the base leg. Opposing traffic situations may occur. Equally, before approaching the final turn, ensure that the final approach is clear.'

The CFI noted that the ASK8 pilot had been re-briefed on extant Gliding Club operating procedures.

<sup>&</sup>lt;sup>1</sup> SERA.3205 Proximity.

<sup>&</sup>lt;sup>2</sup> SERA.3225 Operation on and in the Vicinity of an Aerodrome.

<sup>&</sup>lt;sup>3</sup> UK AIP AD 2.EGHF-6, 2.22 Flight Procedures, 1 Circuits, paragraph (b).

### Summary

An Airprox was reported when a DA42 and a K8 flew into proximity at about 1446 on Wednesday 10<sup>th</sup> January 2018. Both pilots were operating under VFR in VMC, both in receipt of an Air Ground Communication Service.

### 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 involved and reports from the appropriate operating authorities.

Members first discussed the chronology of events and agreed that the DA42 pilot had been established on final approach when the ASK8 pilot crossed ahead, through the runway centreline. Although this was in contravention of the gliding club operating procedures it was, nonetheless, a SERA requirement that 'power-driven heavier-than-air aircraft shall give way to sailplanes', which members agreed the DA42 pilot had achieved by going-around. To that extent it was agreed that the cause had been a conflict in the visual circuit resolved by the DA42 pilot.

Turning to how the situation had arisen, members discussed to what degree the DA42 pilot had been aware that gliders operating at Lee-on-Solent could land on either side of the runway. It was noted that such information was not contained in the relevant UK AIP entry, or the airfield website, and members resolved to recommend that, 'Lee-on-Solent include information in their AIP entry to highlight the possibility of glider traffic crossing the centreline and the existence of a glider landing strip on the north-western side of the main runway'. Members felt that although the DA42 pilot had been aware of the ASK8 in the left-hand 'glider circuit' he had not been aware that its pilot's intention was to land on the right side of RW23, thereby having to cross the centreline, and that this was a contributory factor. Although the ASK8 pilot reported that he had made a call "...crossing the extended centre-line to land grass-right [ASK8 C/S]", this had either not been heard or assimilated by the DA42 pilot. Because there was no R/T recording equipment at Lee-on-Solent, it could not be determined at what stage his call had been made relative to the DA42 pilot's position; members thought that if the ASK8 pilot had communicated his intentions at the start of his downwind leg, this would have improved SA both in the DA42 cockpit and at the A/G Operator station.

Notwithstanding the SERA requirements, local orders made it clear that it was for the ASK8 pilot to make sure he did not cross the centreline if an aircraft was on final, which could have been achieved by landing on the promulgated glider strip to the left of RW23. In the event, the ASK8 pilot had seen 'an aircraft' on base, did not perceive that the DA42 would be on final before he crossed the centreline, and had crossed the runway centreline in front of DA42 on final approach, which the Board agreed was also contributory. Nevertheless, members agreed that the DA42 pilot had seen the ASK8 in good time, and had taken effective and timely avoiding action by going around.

### PART C: ASSESSMENT OF CAUSE AND RISK

<u>Cause</u> :	A conflict in the visual circuit resolved by the DA42 pilot.		
Contributory Factors:	1. The DA42 pilot was not aware the ASK8 pilot was going to cross the centreline.		
	2. The ASK8 pilot crossed the runway centreline in front of DA42 on final approach.		
Degree of Risk:	С.		
Recommendation:	Lee-on-Solent include information in their AIP entry to highlight the possibility of glider traffic crossing the centreline and the existence of a glider landing strip on the north-western side of the main runway.		

### Safety Barrier Assessment<sup>4</sup>

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

### ANSP:

**Regulations, Processes, Procedures and Compliance** were assessed as **ineffective** because promulgated procedures at Lee do not include the potential for glider operation on the northwest grass area.

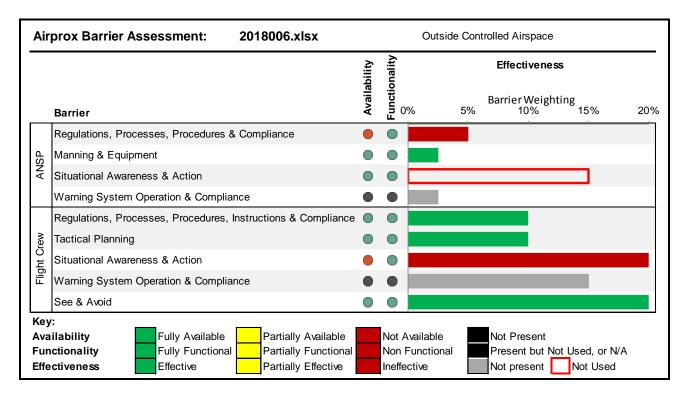
Situational Awareness and Action were assessed as not used because neither pilot was in receipt of a service which required the operator to detect confliction.

Warning System Operation and Compliance were assessed as not present because no warning systems were fitted.

#### Flight Crew:

**Situational Awareness and Action** were assessed as **ineffective** because the DA42 pilot did not assimilate that the glider pilot's intention was to cross the centreline.

Warning System Operation and Compliance were assessed as not present because neither aircraft was fitted with a warning system.



<sup>&</sup>lt;sup>4</sup> The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the <u>UKAB Website</u>.