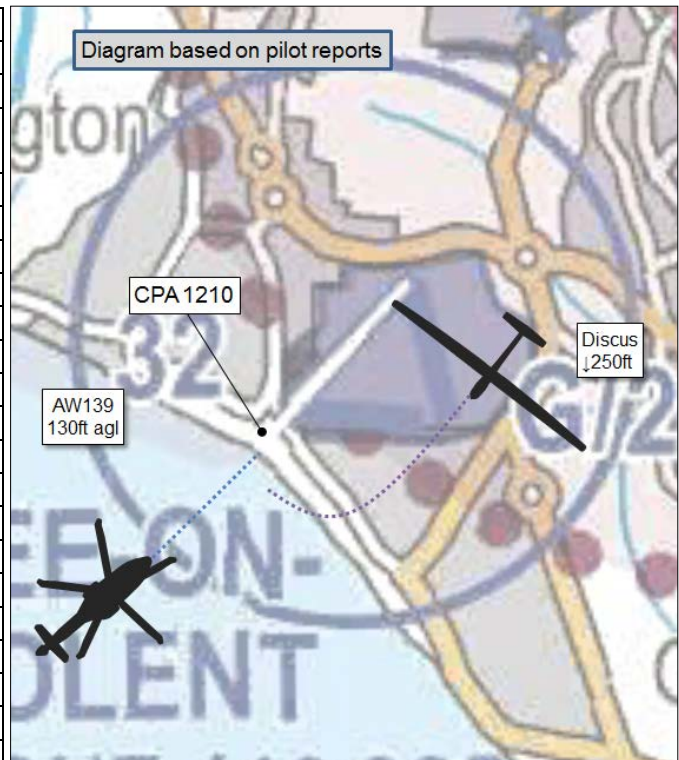


AIRPROX REPORT No 2017016

Date: 05 Feb 2017 Time: 1200Z Position: 5049N 00112W Location: Lee-on-Solent

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	AW139	Duo Discus
Operator	HEMS	Civ Club
Airspace	Lee-on-Solent ATZ	Lee-on-Solent ATZ
Class	G	G
Rules	VFR	VFR
Service	AGCS	AGCS
Provider	Lee-on-Solent	Lee-on-Solent
Altitude/FL		
Transponder	A, C, S	Not Fitted
Reported		
Colours		
Lighting		
Conditions	VMC	VMC
Visibility		15km
Altitude/FL	130ft	250ft
Altimeter	QFE	QFE
Heading	050°	050°
Speed	20kt	55kt
ACAS/TAS	Unknown	FLARM
Alert	Unknown	None
Separation		
Reported	Not reported	0ft V/500ft H
Recorded	NK	



THE AW139 PILOT reports that he was established on finals for RW05, and was carrying out a simulated poor weather approach for pilot training. The RHS pilot was using an IF hood, restricting his vision. He had made his intentions clear on the RT before joining the circuit pattern. The crew were aware that the glider circuit was active. They called finals at about 1.5nm whilst crossing the shoreline at 130ft agl. Once above the threshold, ‘Lee Tower’ asked if they were visual with the glider on finals. They weren’t, but the winch-crew then saw the glider immediately behind, and very close, reported by the winchman to be two rotor spans away. He ordered the pilot to go-around to create distance between the two aircraft. During the final approach, neither the LHS pilot, nor the winch-crew were visual with the glider despite maintaining a good look-out, and did not hear any RT communications from either the glider or from ‘Lee Tower’ regarding the location of the glider.

He did not provide an assessment of the risk of collision.

THE DISCUS PILOT reports that he first noticed the SAR helicopter at about the same time as making a downwind call for RW05RH. The instructor pointed it out to the P2, and he acknowledged. Initially, he thought that it was hovering over the extended centre-line of RW05, about ¼ to ½ nm from the threshold, but towards the end of the downwind leg, he could see that it was much closer to the airfield boundary. He called ‘base-leg, visual with the helicopter’ and instructed the P2 to retain as much height as possible. He expected the helicopter to continue its approach and then turn to its usual landing area to the east of the runway. They turned final behind it, but with significantly more ground speed. The approach continued but it was becoming more difficult to remain visual from the rear seat because the helicopter was becoming obscured below the nose of the glider. He had continued to let the P2 fly, but was just about to take over and turn away when he heard a radio call and saw the helicopter take avoiding action. He allowed the P2 to make an approach, cautioning about the down-draught. He had not expected the helicopter to take as long as it did on the approach

and, although he could have had a radio conversation earlier to ascertain its intentions, he had not expected there to be a problem at that stage because he expected the helicopter to move from the runway to his dispersal as usual. Once he was below about 700ft he was committed to land on the airfield; however, he had classed the event as 'no risk of collision', because he was visual with the helicopter at all times, had time to take avoiding action if necessary, and was confident that he had the option to land on the grass either side of the runway.

He assessed the risk of collision as 'None'.

THE LEE AIR-TO-GROUND OPERATOR reports that RW05 was in use when the AW139 reported 2nm final for a bad weather approach (low-and-slow approach). The glider reported downwind 05 to land on the hard runway. The glider was given Traffic Information on the helicopter, which was acknowledged. The glider pilot reported right base, and the AW139 was asked if he was visual with the glider on base, to which he replied 'standby'. The glider was seen to turn final just above and behind the helicopter. The AW139 pilot reported not visual with the glider and performed a go-around back into the powered circuit, which kept the helicopter ahead of the glider at all times. The glider then opened his airbrakes and continued the approach to RW05 to land. The AW139 completed one powered circuit before landing.

Factual Background

The weather at Southampton was recorded as follows:

METAR EGHI 051320Z 36012KT 9999 SCT016 06/04 Q1003=

UKAB Secretariat

The AW139 and Glider 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. 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.³

CAP452 – Aeronautical Radio Station Operator's Guide states:

Air Ground Communications Service (AGCS) is a service provided to pilots at specific UK at aerodromes. However, it is not viewed by the UK as an Air Traffic Service because it does not include an alerting service as part of its content.

AGCS radio station operators provide traffic and weather information to pilots operating on and in the vicinity of the aerodrome. Such traffic information is based primarily on reports made by other pilots. Information provided by an AGCS radio station operator may be used to assist a pilot in making a decision; however, the safe conduct of the flight remains the pilot's responsibility.

Summary

An Airprox was reported when an AW139 and a Discus flew into proximity at 1200 on Sunday 5th February 2017. Both pilots were operating under VFR in VMC and in the visual circuit at Lee-on-Solent.

¹ SERA.3205 Proximity.

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

³ SERA 3210 (Right-of-way) (4)Landing.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from the pilots of both aircraft and a report from the AGO involved.

The Board started by looking at the actions of the AW139 pilot. He was undertaking a bad weather approach, which meant he was approaching the runway very slowly and lower than usual. The Board wondered whether the other users of Lee-on-Solent airfield were aware of this procedure, because it appeared that the glider pilot did not expect it. There was some suggestion that this might be a new procedure, and the Board felt that, if this was the case, then the airfield operators should have undertaken to thoroughly brief all airfield users accordingly. Given that the glider pilot had made appropriate radio calls on frequency, the Board was unsure why the AW139 pilot was not aware of the glider on finals. Although he stated that he was aware that the glider circuit was active, and whilst acknowledging that the approach might have required a lot of in-cockpit communications, members were surprised he hadn't heard either the glider call, or the AGO reply. In the end, it was the AGO who alerted them to the glider by asking whether they were visual with it; this cued the winchman to look and subsequently see the glider. In fact, his good team-work in calling the glider meant that the AW139 pilot was able to climb away so that the glider could use the runway.

Turning to the glider pilot, the Board recognised that he wasn't expecting the helicopter to take as long as it did on the approach but they were somewhat surprised that he elected to continue his own approach for as long as he did. Early in the finals turn he still had plenty of options for using the grass strip by the side of the runway, and the glider member commented that by allowing the helicopter to disappear under the nose he risked running out of options. The gliding member went on to opine that he himself would also have been far more wary of flying through the helicopter's downwash. Overall, the Board thought the glider pilot had made a number of assumptions, and had he queried the helicopter's intentions over the R/T he would have known whether he needed to use the grass strip in good time, rather than as a last minute decision.

When it came to analysing the cause and risk of the incident there was considerable discussion about who actually had right-of-way. Although the helicopter would normally give way to the glider, being lower and established on finals meant that some members felt the helicopter pilot had the right to use the runway given that there were other options available to the glider pilot following behind. Being an Air-to-Ground station further complicated the situation because there was no ATC to give clearances or sequencing. In the end the Board felt the situation was best described as a conflict in the visual circuit resolved by the AW139 pilot. Noting that the glider pilot was visual with the AW139 throughout, the risk of collision was assessed as Category C, although safety was degraded, there was no risk of collision.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A conflict in the visual circuit resolved by the AW139 pilot.

Degree of Risk: C.

Safety Barrier Assessment⁴:

The Board decided that the following key safety barriers were contributory in this Airprox:

⁴ Modern safety management processes employ the concept of safety barriers that prevent contributory factors or human errors from developing into accidents. Based on work by EASA, CAA, MAA and UKAB, the table depicts the barriers associated with preventing mid-air-collisions. The length of each bar represents the barrier's weighting or importance (out of a total of 100%) for the type of airspace in which the Airprox occurred (i.e. Controlled Airspace or Uncontrolled Airspace). The colour of each bar represents the Board's assessment of the effectiveness of the associated barrier in this incident (either Fully Effective, Partially Effective, Ineffective, or Unassessable/Inapplicable). The chart thus illustrates which barriers were effective and how important they were in contributing to collision avoidance in this incident. The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).

Flight Crew Situational Awareness was **partially effective** because the glider pilot was not fully aware of the intentions of the AW139.

Onboard Warning/Collision Avoidance equipment was **ineffective** because neither aircraft had a compatible TAS.

See and Avoid was **partially effective** because the AW139 pilot was not visual with the glider until the latter stages of the incident and then had to take late avoiding action.

