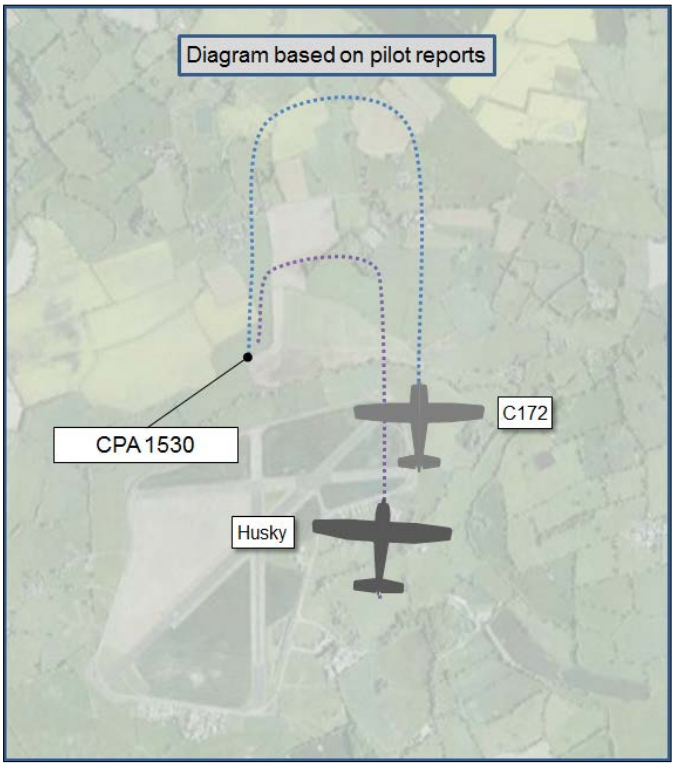
AIRPROX REPORT No 2016136

Date: 02 Apr 2016 Time: 1530Z Position: 5250N 00246W Location: Sleap Airfield

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	C172	Husky
Operator	Civ Trg	Civ Trg
Airspace	Sleap ATZ	Sleap ATZ
Class	G	G
Rules	VFR	VFR
Service	AGCS	AGCS
Provider	Sleap	Sleap
Altitude/FL	NK	NK
Transponder	S	NK
Reported		
Colours	White, Red	Yellow, Blue
Lighting	Strobe	NK
Conditions	VMC	VMC
Visibility	>10km	NK
Altitude/FL	400ft	
Altimeter	QFE	
Heading	180°	
Speed	70kt	
ACAS/TAS	Unknown	Unknown
Alert	Unknown	Unknown
Separation		
Reported	100ft V/100m H	NK
Recorded	NK	



THE C172 PILOT reports that he was returning to Sleap airfield from the South. He called Sleap A/G to report his approach which was acknowledged with relevant airfield data. As he approached the ATZ he heard a call from a Sleap-based pilot in a Pitts who was getting airborne for an aerobatic detail over the airfield, down to 1000ft or 1500ft. He called the tower and reported that he would join downwind, and positioned accordingly, the A/G operator acknowledged. He was aware that a Husky was also in the circuit. He reported downwind and, when late downwind, he heard another Sleap-based pilot report that he was approaching from the North and positioning on long-final. He couldn't see the other aircraft and reported his intention to extend downwind, which was acknowledged. After a short time, he queried the position of the traffic on final and was informed by the A/G operator that the aircraft was now on short-final. He turned left-base and then final for a normal approach. He called final, which was acknowledged. He then saw the Husky late downwind to his left on a tight low-level circuit. Almost simultaneously a Pitts came into view late downwind beyond the right wingtip of the Husky in a steep climb, presumably into the overhead. He then saw the Husky turn onto left-base. He closely monitored the approach of the aircraft. When it became apparent that it would pass behind him he continued on to the runway. The Husky went around. The pilot of the Husky queried with the A/G operator whether he (the C172 pilot) had reported final as the Husky pilot had heard no transmissions or seen the C172.

He assessed the risk of collision as 'Medium'.

THE HUSKY PILOT reported by telephone that he cannot fully remember the details due to the time between the incident and the report being submitted. He did remember that he didn't hear any radio calls from the C172 pilot, he also recalls that another pilot in the circuit didn't hear any calls either. He further said that he was instructing a student and they were both looking for the C172, the first they saw was when it appeared slightly to their right and underneath them, they then went around to avoid the C172.

Factual Background

The weather at Shawbury was recorded as follows:

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METAR EGOS 021350Z AUTO 18007KT 9999 FEW026/// BKN070/// 11/07 Q1009
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Analysis and Investigation

UKAB Secretariat

The C172 and Husky pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard[1]. 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[2].

Summary

An Airprox was reported when a C172 and a Husky flew into proximity at 1530 on Saturday 2nd April 2016. Both pilots were operating under VFR in VMC and both pilots were in receipt of an AGCS from Sleap.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from the pilots of both aircraft, transcripts of the relevant RT frequencies, radar photographs/video recordings, reports from the air traffic controllers involved and reports from the appropriate ATC and operating authorities.

The Board began their deliberations by looking at the actions of the C172 pilot and noted that he had extended his visual circuit downwind in order to integrate with an aircraft joining straight in allow them to adequately deconflict themselves and arrange their flight to conform with the pattern of traffic. The Board could not determine why it had been that the Husky pilot and other aircraft in the circuit had apparently not heard the C172 pilot's final call, but they agreed that this had been a key factor in the resulting incident given that the Husky pilot therefore was not able to update his situational awareness of the C172's position.

The Board then turned to the actions of the Husky pilot. Members noted that he had been aware of the C172 in the circuit but may not have heard the C172 pilot state his intention to extend downwind. Having not heard the C172 pilot's finals call, GA members commented that alarm bells should have been ringing in the Husky pilot's mind, and that he would have been well served in making a radio call asking the C172 pilot for his position before he turned onto base leg and finals himself. Notwithstanding, the Board noted that he and his student had appropriately increased their lookout but it had been unfortunate that they had not seen the C172 until relatively late and had had to initiate a go-around when he realised the aircraft were in confliction.

The Board then looked at the barriers that were relevant to this Airprox and decided that the following were key contributory factors:

- **Flight Crew Acting on Information** was considered **ineffective** because both pilots had been aware of the other aircraft in the circuit but did not use this information to either restate or alter their intentions when they became uncertain.
- **Flight Crew Operational Threat Awareness and Management** was **ineffective** because although both pilots had some information regarding the other aircraft, this could have been enhanced by either the C172 pilot restating his final call when he saw the Husky converging

[1] SERA.3205 Proximity.
[2] SERA.3225 Operation on and in the Vicinity of an Aerodrome.

or the Husky pilot seeking more information when he became uncertain as to the C172's position.

- **See and Avoid** was **partially effective** because the C172 pilot had seen the Husky early but did not alter his track to avoid, and the Husky pilot had not seen the C172 until late and had then had to take avoiding action later than ideal, albeit early enough to avoid a significant degradation in safety.

The Board then considered the cause and risk of the incident and felt that, notwithstanding their comments about extending circuits and seeking clarification of intentions when uncertain, both pilots had largely acted in accordance with normal circuit procedures and so the incident was best described as a simple conflict in the visual circuit that had been resolved by the Husky pilot. Turning to the risk, members noted that the C172 had been visual with the Husky throughout, and that the Husky pilot had acted in a timely and effective manner to avoid the C172 once he had sighted it (albeit later than ideal). As a result, the Board agreed that although safety had been degraded, there had been no risk of collision, and so they assessed the risk as Category C.

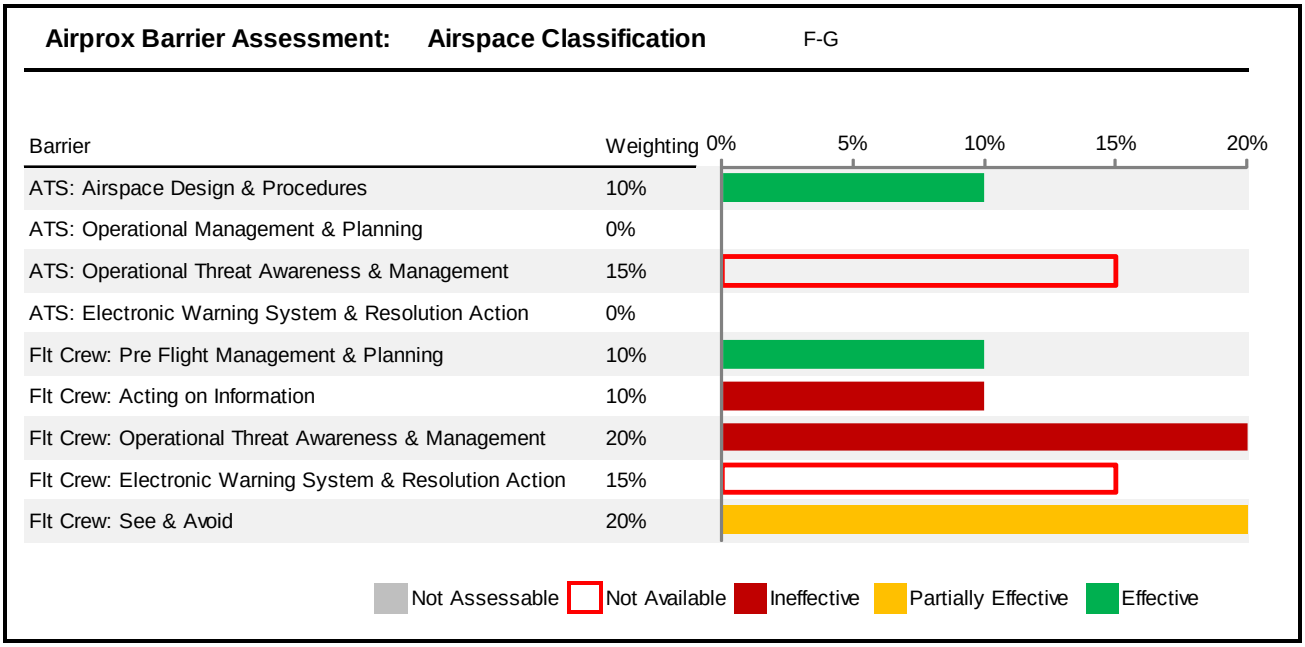
PART C: ASSESSMENT OF CAUSE AND RISK

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

Degree of Risk: C.

Barrier Assessment:

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 following 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).[3] 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, Not Available, or Not Assessable). The chart thus illustrates which barriers were effective and how important they were in contributing to collision avoidance in this incident.



[3] Barrier weighting is subjective and is based on the judgement of a subject matter expert panel of aviators and air traffic controllers who conducted a workshop for the UKAB and CAA on barrier weighting in each designation of airspace.