AIRPROX REPORT No 2013046

Date/Time:	1 Jun 2013 1155	Z (Saturday)	//
Position:	5203N 00024W (4nm WNW Henlow)		
<u>Airspace</u> :	Lon FIR	(<u><i>Class</i></u> : G)	itea
	<u>Reporting Ac</u>	<u>Reported Ac</u>	5
<u> </u>	Vigilant T1 (Grob 109)	Gazelle	2
<u>Operator</u> .	HQ Air (Trg)	Civ Comm	BY
<u>Alt/FL</u> :	↓1000ft QFE (1017hPa)	1000ft QNH (NK)	SF
<u>Weather</u> .	VMC CLBC	VMC NK	700
<u>Visibility</u> :	>10km	10km	1
Reported Separation:			n
	200ft V/250m H	NK	
Recorded Separation:			
1151.51 NK 1/10 2pm H			

1154:54 NK V/0.3nm H 1155:21 NK V/<0.2nm H



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE VIGILANT T1 PILOT reports descending to rejoin RAF Henlow RW31 cct downwind, operating under VFR, in VMC, with an A/G Service from Henlow Information [121.100MHz]. The white and dayglo orange ac had landing, navigation and strobe lights selected on, as was the SSR transponder with Mode A selected; the ac was not fitted with an ACAS. When 1nm NW of Henlow, whilst descending through 1000ft QFE on an approximate heading of 110° at 60kt, the pilot observed a red helicopter (possibly a Gazelle) at a range of 500ft and height of about 1200ft, flying straight and level and transiting diagonally across his line of sight on an approximate heading of 320°. He turned R to avoid possible conflict. He reported the incident to the Duty Instructor upon landing and assessed the risk of collision as 'Low'.

THE GAZELLE PILOT reports transiting VFR from Stapleford to Sywell, in VMC, with a RCS from Sywell, he thought. The red helicopter had navigation and strobe lights selected on, as was the SSR transponder with Modes A and S; the ac was not fitted with an ACAS. The pilot had telephoned Sywell earlier in the day; he was informed that 'they were very busy' and that he would need to arrive before 1230 as there was 'a flying exhibition' between 1230 and 1315. He used proprietary flight planning software to check NOTAMs and entered route information into a GPS unit in the ac. After T/O he routed N, just E of Panshanger ATZ and E of the Luton CTR. At the N/E tip of the Luton CTR he turned W and then NW, remaining W of Henlow and Old Warden and E of Cranfield onto Sywell. He changed frequency to Sywell when W of Henlow, as he was turning NW, at an altitude of about 1000ft at 90kt. He stated that he was maintaining a good lookout at all times and, when about 2nm WNW of Henlow, saw a glider on the RH side, flying E, which appeared to be about 300-400ft higher. He did not see where it came from and assumed it had been much higher as it appeared to be descending when he saw it. He stated that 'it was a good clear day', and that he assumed he would have seen a glider if it was close to him; he did not make an assessment of the risk.

Factual Background

The weather at Luton was recorded as follows:

METAR EGGW 011050Z 33012KT 9999 BKN020 12/07 Q1023

Airprox Secretariat Analysis

Radar identification of the subject Vigilant proved problematic despite further conversation with the Vigilant pilot and Duty Instructor. The diagram shows the 2 likeliest tracks; the N'ly 7000 squawking ac was closer in the horizontal at CPA and correlated with the Gazelle pilot's report of seeing a glider on his RH side but did not correlate with the Vigilant pilot's reported hdg and avoiding action. The S'ly track conforms more closely with the Vigilant pilot's reported actions, albeit at a greater horizontal range at CPA than that reported.

HQ Air Command commented that it was difficult to determine the exact circumstances of the event due to the inability to correlate the pilot's report with the available radar data. A more detailed report by the Vigilant pilot of the manoeuvring immediately before and after the event might have assisted, although the altitude of the Vigilant might preclude it appearing on the radar replay in any case. RAF FS will approach HQ 3 FTS to request that they address the lack of 'pilot pictures' on VGS Airprox reports, as this additionally hampers investigations. In the event, the Vigilant pilot saw and avoided the helicopter.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilots of both ac and radar video recordings.

The Board first considered the pilots' actions. The Board noted that the Gazelle pilot had made an early change to Sywell's frequency and they wondered whether he might have been under some misapprehension as to the ATS that he might receive from them. As a result, he may not have fully realised his collision avoidance responsibilities under a BS (the only service he could have received from Sywell at the Airprox location). Pilot Members opined that, at his chosen transit altitude, he may have been better served by contacting A/Ds in proximity to his flight path and thereby could have been informed of local activity. Alternatively, a climb to the base of CAS could have reduced the potential for conflict. Some pilot members were also of the opinion that giving Henlow a wider berth would have been of benefit. Notwithstanding potential strategies to mitigate collision risk during a transit, the Board recognised that both pilots were entitled airspace users, operating under VFR in Class G airspace and with equal collision avoidance responsibility. From the available evidence, members opined that the subject Vigilant was most likely the S'ly of the 2 VFR squawking tracks shown on the radar recording, and hence the Gazelle pilot had right of way¹. From the information in his report, members opined that the Gazelle pilot had most likely seen the N'ly of the 2 ac and had not seen the S'ly. The Vigilant pilot had seen the Gazelle in good time, albeit at a greater range than reported if his ac was the assumed S'ly track, and had taken appropriate action in the circumstances.

Turning to Cause and Risk, the Board unanimously agreed that there had been a conflict in Class G airspace and that the Vigilant pilot had resolved it by taking effective and timely action. The Board agreed that the pertinent safety barriers were 'aircrew rules and procedures', 'visual sighting' and 'aircrew action' and concluded that although 'visual sighting' had been of limited effectiveness (only one pilot saw the other), 'aircrew rules and procedures' and 'aircrew action' had been effective. Therefore, the Airprox was allocated a score of 2 on the Event Risk Classification Matrix.

PART C: ASSESSMENT OF CAUSE AND RISK

<u>Cause</u> :	Conflict in Class G airspace, resolved by the Vigilant pilot.
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Degree of Risk: C.

ERC Score: 2.

¹ The Vigilant T1 (Grob 109B) is classed as a flying machine for the purposes of Rule 9 (Converging) of the Rules of the Air 2007.