AIRPROX REPORT No 2013122

<u>Date/Time</u>: 31 Aug 2013 1508Z (Saturday)

Position: 50 56N 000 06E

(1.6nm north of Ringmer Glider

Site)

Airspace: London FIR (Class: G)

Reporting Ac Reported Ac

Type: ASW15B Glider F86A Sabre

Operator. Civ Club Civ Pte

<u>Alt/FL</u>: 2500ft 2400ft

QNH (NK hPa) RPS (NK hPa)

<u>Conditions</u>: VMC VMC

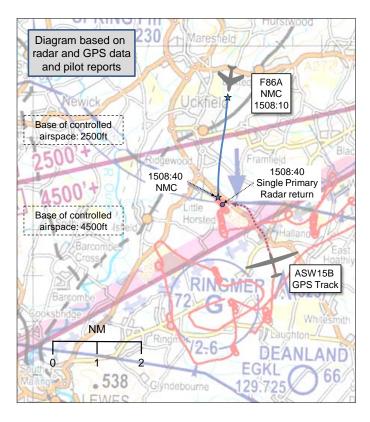
<u>Visibility</u>: 20km NK

Reported Separation:

100m V/Nil H 0ft V/1000m H

Recorded Separation:

NK V/ < 0.1nm H



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE ASW15B PILOT reports that his glider was not fitted with a transponder or lights and that he was in radio contact with 'Ringmer Launch'. He was flying into sun, in a left-hand thermal, VFR in VMC at 2500ft QNH, at 48kt, and passing a heading of around 090°, when he heard a 'large aircraft jet noise' on his right-hand side and saw the Sabre 'turning from an easterly heading to a southerly heading'. The ASW15B pilot estimated that the Sabre was around 100m away when he first saw it and thought that the Sabre's manoeuvre may have been avoiding action.

THE SABRE PILOT reports flying a predominantly silver aircraft squawking Mode 3/A 7000 with Modes S and C fitted, Mode C was turned on, he recalled. He reports being in radio contact with Shoreham Approach to co-ordinate a 'display slot time' but he had not agreed an Air Traffic Service with them. The pilot reports flying into sun, VFR in VMC, CAVOK, cruising at 240kt, heading 200° and level at 2400ft on the RPS when he saw a glider 1nm away in his 11 o'clock. He recalls that the glider was 'predominantly white, possibly with red or orange wing-tips' and he assessed that it was flying at around 2400ft. The Sabre pilot reports that the glider was 'in a left-hand turn, belly up' to him, and noted that it's pilot may not have seen the Sabre until it appeared 'underneath' the glider's nose as its pilot rolled 'wings level'; he assessed that the Sabre would then have been in the glider's 12 o'clock, and the glider in the Sabre's 9 o'clock. The Sabre pilot 'waggled' his wings to acknowledge that he had seen the glider, and realised that the 'sight of the Sabre in such close proximity directly ahead' may have been alarming to the glider pilot, but it was possible, he thought, that the glider pilot may not have seen the Sabre until the aircraft had 'passed by'. Having achieved 'late visual contact' with the glider, the Sabre pilot realised that he could not climb due to controlled airspace, which he thought had a 2500ft base above him, and assessed that a turn away would have caused him to fly 'belly up' and lose sight of the ASW15B. Furthermore, he reports that a turn towards the glider would also have caused him to lose sight of it and so the Sabre pilot elected to maintain his flight-path, which he assessed would take him 'clear horizontally, albeit closer than usual standards'.

He assessed the risk of collision as 'None'.

Factual Background

The Gatwick weather at 1650 and 1720 was reported as:

METAR EGKK 311650Z 35006KT 300V040 CAVOK 20/05 Q1026 METAR EGKK 311720Z 33008KT 300V010 CAVOK 20/05 Q1026

LARS¹ is provided in the area of the Airprox by Farnborough Radar (East) on 123.225MHz. Shoreham ATC is not equipped to offer Air Traffic radar services.

The F86 pilot was subject to a CAA Permission pursuant to Rule 21(Speed limitations), paragraph 3, of the RoA, which permitted him to fly at a speed that, according to the airspeed indicator, was more than 250kt, and below FL100, in so far as was necessary for the purposes of display practice, display flying training and transit. The permission was granted subject to several conditions, which included:

- (c) the said flights shall only be made in weather conditions which enable the aircraft to remain at least 3 kilometres horizontally and 1000 feet vertically away from cloud and in a flight visibility of at least 10 kilometres;
- (d) on the said flights the aircraft shall not fly unless it is using a radar service, except when it is flying within an Aerodrome Traffic Zone (ATZ) ...'

Analysis and Investigation

CAA ATSI

CAA ATSI reviewed the surveillance recording, RTF, pilots' reports and glider log for this flight, which occurred in Class G, uncontrolled airspace, 1.6nm north of Ringmer glider site. Analysis of an amalgamation of radar and GPS data suggests the Airprox occurred at 1508:39 as the ASK15B was in a left turn with the Sabre 0.09nm north of it. The GPS recorded level of the glider was 2634ft (datum undetermined) and no Mode C was detected from the Sabre. Three seconds later, the ASK15B had rolled-out onto a brief south-southeasterly track, having climbed approximately 50ft, and the Sabre was now 0.18nm south of the glider. The Sabre's ground speed as indicated on Mode S via the Gatwick 10cm radar was between 270kt and 296kt.

The ASK15B was not in receipt of an Air Traffic Service. The Sabre had been in communication with Shoreham ATC (non-surveillance) at 1505 to enquire about a slot time for the air display but no Air Traffic Service was provided. The next communication between Shoreham and the Sabre was at 1510.

UKAB Secretariat

Both pilots had the responsibility to avoid each other². Given that the ASK15B was in a thermalling turn, it could be assessed that the aircraft were either converging or that the Sabre was overtaking the glider; in both cases the Sabre was required to give way to the glider³⁴.

Summary

The Airprox occurred in Class G, uncontrolled airspace between an ASK15B glider, which was in a left-hand thermalling turn at around 2500ft amsl and an F86A Sabre, which was flying on a southerly heading at 2400ft on the RPS. Neither pilot was in receipt of an Air Traffic Service.

Lower Airspace Radar Service

Rules of the Air 2007, Rule 8, Avoiding aerial collisions Rules of the Air 2007, Rule 9, Converging

⁴ Rules of the Air 2007, Rule 11, Overtaking

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilots of both aircraft, transcripts of the relevant RT frequencies, radar photographs/video recordings, and a report from the appropriate ATC authority.

The Board noted that the Sabre pilot had not requested an Air Traffic Service, which may have been available from Farnborough LARS. Although the pilot reported flying just below the 250kt speed at which he would be required to obtain a Radar Service under the terms of his CAA permission to fly, Board members opined that, in such busy airspace, and with such a high performance aircraft, he would have been well served in seeking a Radar Service regardless of his airspeed. Nonetheless, members also conceded that, in this particular event, it would have been unlikely that Farnborough's radars would have been able to detect the ASW15B.

With regard to gliding activities, the Board commented that pilots flying in this area needed to be very alert to glider winch and aero-tow operations; tracking towards Ringmer at 2400ft (below the notified 2600ft top altitude of Ringmer's winch launch), the Sabre pilot would have needed to manoeuvre positively to avoid Ringmer laterally. Moreover, gliding members informed the Board that there are often many gliders in the area near to Ringmer and, if the wind is correct, all along the South Downs area.

The Board agreed unanimously that the cause of the Airprox was a late sighting by the Sabre pilot and, effectively, a non-sighting by the ASW15B pilot. Although the CPA was less than 0.1nm, the Board noted that the Sabre pilot had reported seeing the glider 1nm away and so they reasoned that the degree of risk could not be an A, (minimal separation and nothing more could have been done to improve the situation). On the other hand, members also opined that, in those circumstances, they would have expected the Sabre pilot to have taken early action to avoid the glider by a greater margin and so neither could the degree of risk be a C (effective and timely actions were taken to prevent the aircraft colliding). The Board therefore considered that, although the Sabre pilot was visual with the glider, his lack of action meant that safety margins had been much reduced below the normal and that the degree of risk was B.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A late sighting by the Sabre pilot and, effectively, a non-sighting by the

ASW15B pilot.

Degree of Risk: B

ERC Score⁵: 20

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⁵ Although the Event Risk Classification (ERC) trial had been formally terminated for future development at the time of the Board, for data continuity and consistency purposes, Director UKAB and the UKAB Secretariat provided a shadow assessment of ERC.