

AIRPROX REPORT No 2012159

Date/Time: 20 Oct 2012 1330Z (Saturday)

Position: 5155N 00102W (3.5nm E
Bicester G/S - elev 267ft)

Airspace: LFIR (Class: G)
Reporting Ac **Reported Ac**

Type: Scheibe SF25C C172
Falke M/Glider

Operator: Civ Club Civ Pte

Alt/FL: 2100ft↓ 2100ft
(amsl) (QNH)

Weather: VMC CLNC VMC HZBC

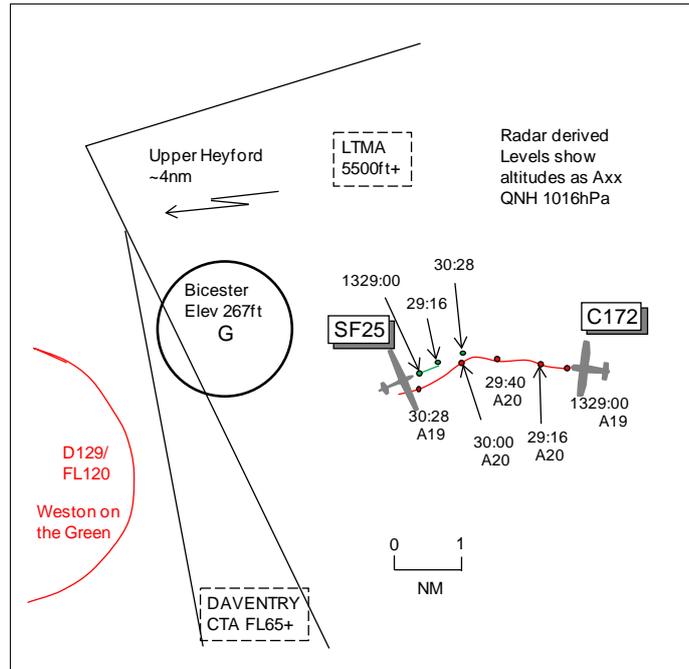
Visibility: >10nm >10nm

Reported Separation:

30ft V/100m H Not seen

Recorded Separation:

NR



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE SCHEIBE SF25C FALKE MOTOR GLIDER PILOT reports flying a dual training sortie from Bicester, VFR and in communication with Bicester Gliding on 129-975MHz; no transponder was fitted. The visibility was >10nm in VMC and the ac was coloured white/red with anti-collision beacon switched on. This was an NPPL SLMG instructional flight which involved a series of slow speed handling exercises interspersed with HASELL checks just to the E of Bicester cct/local glider flying area. About 3nm E of Bicester heading 080° at 2100ft amsl and 50kt during the student's nose pitch-down recovery from a stall, a C172 appeared in view ahead about 500m away, above the nose of their ac approaching from their 1 o'clock. They rolled L to increase separation and the C172 pilot appeared to see their ac at the same time as it also rolled L simultaneously. The C172 passed 30ft above and 100m clear on their RHS, its registration was clearly visible. He assessed the risk as medium. He opined that this was a classic example of circumstantial late sightings and effective collision avoidance by both pilots, which highlighted the importance of lookout at all times.

THE C172 PILOT reports flying a local sortie from Wycombe Air Park, VFR and in receipt of a TS from Farnborough LARS on 132.8MHz and then a BS from Oxford Approach on 127.75MHz, squawking with Modes S and C; TCAS 1 was fitted. The visibility was >10nm in VMC and the ac was coloured blue/white with strobes, nav and recognition lights all switched on. At the reported position of the Airprox he was flying at 2100ft QNH and 100kt heading W keeping Bicester glider site on his R and staying in the 'corridor' between Bicester and Weston-on-the-Green with Upper Heyford in view. He thought he changed frequency at this time from Farnborough to Oxford. TCAS was operating at 12nm range but he did not recall having a TCAS contact or seeing any conflicting ac in proximity as he tracked around Bicester and headed N of Upper Heyford, parallel to and N of the RW. On contacting Oxford he was aware of conflicting traffic at Blenheim and during the whole flight had received a number of TIs both from ATC and from TCAS.

ATSI reports that an Airprox was reported 3nm E of Bicester gliding site when a Scheibe SF25C (SF25) and a C172 came into proximity with each other.

The SF25 flight was operating VFR on a training sortie at Bicester gliding site and was in contact with Bicester Gliding on frequency 129-970MHz. The C172 flight was operating VFR to and from

Wycombe Air Park (Booker) and had been in receipt of a BS from Farnborough LARS N on frequency 132.8MHz before changing frequency to Oxford Approach and agreeing a BS from them on frequency 127.75MHz.

CAA ATSI had access to written reports from the pilots of the SF25 and the C172, recordings of Farnborough LARS N and Oxford Approach frequencies together with area radar recordings.

Oxford METARS were not available for the time of the incident - the Luton METARs were:

EGGW 201320Z VRB02KT 9999 FEW010 13/10 Q1017= and EGGW 201350Z VRB03KT 9999 FEW010 13/11 Q1017=

At 1312:00 Farnborough LARS N downgraded the service being provided to the C172 from a TS to a BS due to the C172 leaving solid radar coverage.

[UKAB Note (1): At 1329:00 a pop-up primary-only return appears, believed to be the SF25, 2.9nm to the ESE of Bicester gliding site (Figure 1). The C172 is seen 2.2nm to the E of the SF25 on a W'ly heading level at altitude 1900ft QNH 1016hPa having turned from a N'ly track. The SF25 remains on a track of 080° before fading from radar after the sweep at 1329:16 when 3.2nm ESE of Bicester with the C172, now indicating 2000ft, in its 1 o'clock range 1.5nm.]



Figure 1

At 1329:40 the C172 is 4.2nm to the E of Bicester gliding site, tracking W with Mode C indicating altitude 2000ft. The pilot of the C172 requested to change frequency to Oxford Approach on 127.750MHz. The Farnborough LARS N controller instructed the C172 pilot to squawk 7000 and approved the frequency change.

[UKAB Note (2): The C172 is seen to continue on its W'ly track until 1330:00 when it is seen to turn onto a SW'ly 3.5nm E of Bicester, approximately the reported Airprox position. This alteration of track by the C172 may be the turn observed by the SF25 pilot whilst he turned L to increase separation; the C172 pilot did not see the SF25. At 1330:28, when the C172 is 2.9nm E of Bicester squawking 7000 at altitude 1900ft, a pop-up primary return appears 0.8nm NE of it which may be the SF25, the ac having passed during its radar fade period.]

Between 1330:28 and 1332:55 the C172 tracks W at 1900ft, passing 0.7nm to the S of Bicester gliding site. The radar recordings do not show any other traffic in proximity to the C172 during this time.

At 1332:55 the C172 is 0.8nm WSW of Bicester gliding site at 1900ft and at 1333:10 the C172 flight contacted Oxford Approach.

The Airprox took place in Class G uncontrolled airspace where regardless of the service being provided pilots are ultimately responsible for their own collision avoidance.

Prior to the Airprox the C172 flight was being provided with a BS from Farnborough LARS N which had been downgraded from a TS due to lack of radar cover. There is no requirement to monitor the flight under a BS.

At the reported position of the Airprox the C172 flight had left the Farnborough LARS N frequency and had not yet contacted Oxford approach.

The Airprox was reported in Class G airspace when the pilot of the SF25 observed a C172 in close proximity near Bicester gliding site.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilots of both ac, radar photographs/video recordings and reports from the appropriate ATC authorities.

Commensurate with the incident occurring in Class G airspace, both pilots were responsible for maintaining their separation from other traffic through see and avoid. The C172 pilot was transiting the area, threading his way between Bicester and Weston-on-the-Green (WOG), both busy aviation sites where gliding and paradropping/gliding activity respectively should be expected daily. The gliding pilot Member commented that in addition to careful route flight-planning to avoid glider sites by as wide a margin as possible, the risk of encountering gliders could be further reduced by selecting a cruising altitude clear of the height band where gliders might be anticipated; in thermic weather conditions gliders normally circle to gain altitude beneath convective cloud up to the cloudbase before setting off en route and in search of the next area of lift.. Pilot Members also commented that routing to the N of Bicester would lead to ac passing further away from the WOG activity and avoiding the 'funnel' effect with Bicester but the ac would pass closer to Croughton HIRTA where due regard needs to be taken against the effects of radio energy transmissions and possible interference to equipment onboard. The Falke pilot was operating autonomously to the E of Bicester and saw the C172 500m away during the recovery from a stall as the ac's nose was lowered, which Members judged to be a late sighting and part cause of the Airprox,. He executed a L turn to increase separation whilst he watched the C172 turn L simultaneously before it passed, he estimated, 100m away on his R. Although he believed the C172 pilot had taken complementary avoiding action, unbeknown to him the L turn observed was purely fortuitous. At the time, the C172 pilot had just 'signed-off' with Farnborough and was changing frequency to Oxford so he may have been heads-in just at a critical time of the Airprox evolution; his L turn was just a navigational adjustment to his flightpath to pass clear of Bicester. The ATS had been downgraded to a BS over 17min before the encounter and, although the C172 was equipped with TCAS1 there was no electronic warning of the Falke, owing to its lack of transponder. The Falke passed unsighted to the C172 pilot, another part cause of the incident.

In assessing the risk, without corroborating evidence of the separation that pertained from the recorded radar as the Falke had faded from radar just prior to the CPA, Members were unsure. Although acutely aware of the difficulties in estimating distances whilst airborne, Members had no reason to doubt the Falke pilot's reported separation particularly when the C172's registration marks could be clearly seen. The Falke pilot had turned L which ensured that the ac were not going to collide; however, with the C172 pilot not seeing the Falke and the timing of his L turn being fortuitous, the Board believed that in these circumstances the safety of the ac was not assured.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A non-sighting by the C172 pilot and a late sighting by the Falke pilot.

Degree of Risk: B.