

AIRPROX REPORT No 2013118

Date/Time: 20 Aug 2013 1344Z

Position: 5207N 00108W
(4nm NW Turweston Airfield)

Airspace: Lon FIR (Class: G)

Reporting Ac Reported Ac

Type: LS8 Glider PA31

Operator: Civ Pte Civ Comm

Alt/FL: 4500ft 4500ft
NK QNH

Weather: VMC CLOC VMC CLBC

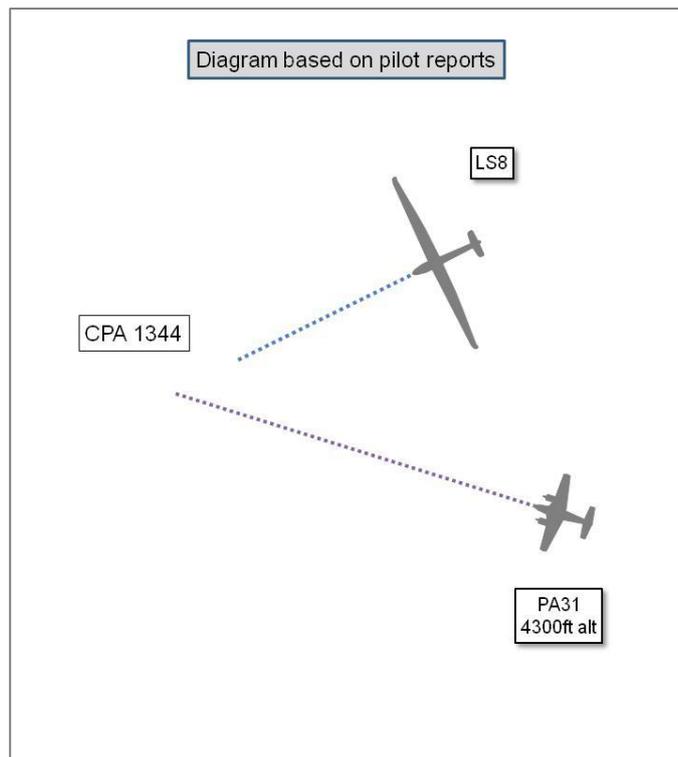
Visibility: >20km >10km

Reported Separation:

100ft V/100m H NK

Recorded Separation:

NK



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE DG FLUGZEUGBAU LS8-T (LS8) PILOT reports he was flying a single-seat white glider on a cross-country flight bound for Nympsfield airfield from the Northampton area in cruising-mode in good visibility. Frequency 130.125MHz¹ was selected. The glider was equipped with FLARM, which was in use. The cloud base was about 5500ft amsl. A twin-engined light aircraft appeared in his 8 o'clock at a marginally higher altitude on a course crossing ahead of him. He estimated that the aircraft was around 150m away when first seen and crossed his 12 o'clock at around 100m horizontally. The vertical separation was about 100ft when it was in his 12 o'clock. He slightly hesitated with his avoiding action as his first instinct was to turn right but decided that putting the nose down would increase the separation more effectively. The other aircraft quickly passed in front, so he returned to his normal cruising altitude. He was able to read the aircraft's registration. He watched it perform a gentle left turn towards the cumulus cloud, to which he was heading. Under the cloud it appeared to level out and flew off to his left (approximately a south-east direction). Due to the difference in altitudes he believed that there would not have been a collision, even if he had not reacted. However, he thought that the separation was far too close. He saw no abrupt change in flight path of the other aircraft, concluding that its pilot had not seen him.

He assessed the risk of collision as 'None'.

The PA31 NAVAJO PILOT reports his aircraft is coloured predominantly white; wing-tip and rear HISLs were illuminated. SSR Modes C and S were selected. The PA31 was not equipped with ACAS. He had been conducting an aerial survey in the vicinity of Turweston and Hinton-in-the-Hedges airfields (remaining clear of both ATZs vertically and/or horizontally) with one pilot and three passengers. Prior to the survey period both Turweston and Hinton were contacted by telephone to explain the nature of his operation. As he was aware that gliding competitions were on-going in the UK, the pre-flight brief to his passengers requested that if anyone saw aircraft close by, they should report them to him over the intercom. Once airborne Turweston and Hinton drop-zone were contacted on RTF, with little reported activity for the duration of the survey. Further occasional calls to Hinton drop-zone were made to inform them of his proximity to their parachuting operations. These calls were acknowledged by Hinton drop-zone. He reported the visibility as good, there was some

¹ British Gliding Association (BGA) members are assigned 5 RT frequencies (including 130.125MHz) by the CAA with which to facilitate intra-glider and Aeronautical Ground Station communications.

convective cloud with a base of approximately 4500-5000ft. He (and the passengers) saw several gliders during their flight (at reasonable distances) but did not see the glider that reported the Airprox.

Factual Background

The weather at Coventry was:

METAR EGBE 201350Z 23006KT 200V280 9999 FEW045 22/11/Q1027=

The LS8 pilot was flying in a competition notified by the following NOTAM:

H3863/13
EGTT/QWGLW/IV/M/W/000/100/5143N00217W010
MAJOR GLIDING COMPETITION INCLUDING CROSS-COUNTRY RTE. INTENSE ACT WI
10NM RADIUS 514251N 0021701W (NYMPSFIELD AD, GLOUCESTERSHIRE). UP TO
30 GLIDERS AND 5 TUG ACFT MAY PARTICIPATE. GLIDERS WILL NORMALLY OPR
BLW THE INVERSION LVL OR BTN THE TOPS OF ANY CU CLOUDS AND 500FT AGL.
RTF CTC 129.975MHZ. FOR INFO ON DAILY TASK RTE CTC GLIDER CONTEST
CTL TEL 01453 860342 OR 07710 796295 OR VIEW
WWW.BGALADDER.CO.UK/SHOWTASK.ASP FOR NYMPSFIELD. 13-08-0266/AS3.
LOWER: SFC
UPPER: FL100
FROM: 17 AUG 2013 04:57 TO: 25 AUG 2013 19:11
SCHEDULE: SR-SS

Analysis and Investigation

CAA ATSI

An Airprox was reported in Class G airspace by an LS8 glider pilot when he came into proximity with a Piper PA31.

The LS8 was operating VFR on a cross country flight from Nympsfield gliding site, was in contact with a frequency allocated to gliding sites and was not in receipt of an air traffic service.

The PA31 was operating a VFR flight in the vicinity of Turweston and Hinton airfields and the pilot had previously contacted Coventry ATC for a basic service on frequency 123.825MHz. However, at the time of the reported Airprox the PA31 was not in receipt of an air traffic service and was probably in contact with Turweston Air/Ground.

ATSI had access to both pilot reports, recorded area surveillance and transcription of frequency 123.825MHz.

At 1307:40 the PA31 pilot requested a Basic Service from Coventry Radar advising the controller that he was conducting an aerial survey in the Turweston area between 2000ft and FL65, outside controlled airspace. The Coventry controller advised that the airspace was fairly active in the vicinity of Turweston with gliders and GA aircraft, and that the PA31, he thought, would receive a better service from Turweston. At 1308:20 the PA31 reported leaving the frequency to contact Turweston.

At 1311:10 the PA31 pilot briefly contacted Coventry again to check a level discrepancy between his GPS against his paper map, which Coventry resolved. There were no further transmissions received from the PA31 pilot following the end of this conversation at 1312:40.

At the reported time of the Airprox (1343:41) there is an intermittent radar return behind the PA31. At 1345:17 an intermittent radar return can again be seen on the left-hand side of the PA31 and the subsequent track of the PA31 correlates with that described in the report from the pilot of the glider; however, there is no way to identify the primary return as the glider.

Summary

An Airprox was reported by the pilot of an LS8 glider when he came into proximity with a PA31 in Class G, uncontrolled airspace. Weather conditions were reported by both pilots as good. Neither aircraft was in receipt of an air traffic service at the time of the Airprox. Both pilots were operating under VFR in VMC and were equally responsible for collision avoidance²; the PA31 pilot was required to give way to the glider.³

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilots of the aircraft involved, radar video recordings, a transcript of the relevant RT frequency, a GPS logger file and reports from the appropriate ATC and operating authorities.

The Board first considered the pilots' actions. Both pilots, flying under VFR in Class G airspace, were equally responsible for collision avoidance. However, in accordance with Rule 9, the PA31 pilot should have given way to the glider. With regard to the PA31, its pilot was conducting an aerial survey in the vicinity of Turweston and Hinton-in-the-Hedges airfields. He reported that he was aware of gliding activity in his operating area, and had briefed his three passengers to alert him if they saw any aircraft in close proximity. However, neither he, nor his passengers, had observed the subject glider. Civil pilot members queried the layout of the PA31's interior and offered the view that, dependant on the type of survey being carried out, associated equipment and racks in the back of the aircraft may have reduced the ability of the occupants to see the glider. [UKAB Note: since the meeting, it has been established that the internal equipment carried by the PA31 was a mission-rack, which was situated behind the rear-most passenger seat; consequently, views from the aircraft were not affected]. The Board also wondered whether a NOTAM should have been issued warning other airspace users of the survey activity given that aircraft conducting such work can often be rendered relatively non-maneuvrable for the survey duration. The survey company had considered at the time whether a NOTAM should be issued for the survey flight but, because there were four possible sites requested by the customer with the actual location only being notified at very short notice, time-scales precluded the issue of a NOTAM. Notwithstanding, the Board were heartened to note that the survey company have since reviewed their operating procedures such that on future surveys either another pilot or an observer will be carried seated next to the pilot as a 'look-out'.

The LS8 glider pilot was taking part in a glider competition operating from Nympsfield gliding site, which was situated some 50nm from the Airprox location. The Board had previously considered (Airprox 2013079) the effectiveness of notification procedures associated with glider competitions and they again opined that there was potential for improvement because NOTAM information did not sufficiently indicate the area that the gliders would be operating during their daily tasks away from the start site. The Glider member reported that the British Gliding Association (BGA) were actively reviewing the content of glider competition NOTAMs and promulgation of daily task notification. Separately, the Glider member also commented that powered-aircraft pilots should be aware that, in good thermal gliding weather, and especially during competitions, gliders can often be found right up to the base of convective clouds (supported in this instance by the LS8 pilot's report that he had routed towards cumulus cloud). The Glider member felt that awareness of this aspect of gliding operations might help visual acquisition of gliders in such circumstances.

The glider pilot reported sighting the PA31 in his 8 o'clock position, at a range of 150m. Unfortunately, the radar recordings do not show the glider at the time of the Airprox and correlation of this radar recording with the glider's GPS data log shows a very different juxtaposition at the reported time. Consequently, it is possible that the encounter took place at a different time. Notwithstanding the inability to match exactly the radar traces, GPS data-log information and pilot's report, the Board

² Rule 8 (Avoiding aerial collisions)

³ Rule 9(1) (Converging)

considered that, given the glider pilot's strong recollection of the event, there was still enough meaningful information available to be able to discuss the cause and the degree of risk of the Airprox.

The Board turned its attention to the degree of risk. After observing the PA31 at 150m, the glider pilot lowered the glider's nose resulting in it passing 100ft below the PA31 as it crossed 100m ahead. The glider pilot had commented in his report that he considered that the separation between his glider and the PA31 was 'far too close' but that he also assessed the actual risk of collision as 'none'. The Board initially debated whether this event came under the description of a Cat B risk (safety margins much reduced below the normal) but, on balance, it was decided that, given his description of the event and assessment of no risk of collision, even if the glider pilot had not taken any action, the aircraft would not have collided. Consequently, it was agreed that a Cat C risk was appropriate.

The Board unanimously agreed that the cause of the Airprox was a late sighting by the glider pilot and a non-sighting by the PA31 pilot.

PART C: ASSESSMENT OF CAUSE AND RISK

<u>Cause:</u>	A late-sighting by the glider pilot and a non-sighting by the PA31 pilot.
<u>Degree of Risk:</u>	C.
<u>ERC Score:</u>	10