## AIRPROX REPORT No 2012082



## PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

**THE C560XLS PILOT** reports inbound to Oxford, IFR and in communication with Oxford Tower, [actually Approach] squawking 7000 with Modes S and C; TCAS was fitted. The visibility was 10km in VMC and the ac was coloured white with nav, taxi and anti-collision lights all switched on. While turning R entering the OX hold, he thought, at 3500ft and 160kt they crossed a glider in a RH spiral on their L at the same altitude. They did not have the glider in sight until they had passed abeam it and it looked like the glider did an avoiding manoeuvre. The estimated distance was 50m. They continued the NDB approach [NDB(L)DME RWY01] as cleared and descended on the procedure. Established on the outbound leg, the PIC saw a group of gliders (around 5) on a spiral under a big cumulus cloud on the extended RW centreline 4nm from the airfield. They immediately cancelled IFR, left the standard approach flight path in order to avoid the traffic and continued visually in an offset centreline final RW01 before performing a successful landing.

UKAB Note (1): The C560 Capt was contacted to clarify the geometry of the incident. He could not remember entering the OX hold (L turn at OX) and thought he had turned R and flown straight outbound into the procedure. The glider passed to his L as he turned R outbound for the procedure.

**RAC MIL** reports that despite extensive tracing action the identity of the glider remains unknown. The radar replay was inconclusive and procedural tracing action via numerous glider sites did not elicit any likely candidate that matched the glider's profile.

**ATSI** reports that the Airprox was reported to have occurred at 1331 UTC, in the vicinity of Oxford Airport, within Class G airspace and outside the Oxford ATZ, between a Cessna Citation 560XLS (C560) and a glider.

The C560 was an IFR flight, inbound to Oxford from Ajaccio-Corsica (LFKJ) and in receipt of a PS from Oxford Approach on frequency 125-325MHz. The glider was untraced but believed to be one of a number of gliders operating in the vicinity of Oxford.

The Oxford controller was providing Approach control services, without the aid of surveillance equipment.

CAA ATSI had access to area radar recordings, together with a written report from the C560 pilot. Although gliders had been mentioned to the controller, no Airprox report was made to the ATSU, therefore no incident was recorded and the controller did not complete a report. The RT recordings were impounded, but due to a technical problem it was not possible to obtain a replay of the incident. The CAA transcription unit has discussed the issue with the ATSU, who have updated their procedures for checking and impounding both RT and Radar recordings. CAA ATSI visited the unit in order to discuss the incident with the controller concerned and the ATSU. The flight progress strips for the period were copied.

The weather for Oxford was not available; however the weather for Brize Norton is provided: METAR EGVN 271250Z 08008KT CAVOK 25/13 Q1018 BLU NOSIG=

The Approach controller, when questioned, reported that the C560 was coodinated inbound, descending to 3500ft, routeing to the Oxford NDB(L)OX from the SW. The C560 flight was cleared to enter the holding pattern prior to commencing the NDB(L)DME RWY01 procedure (see below), which would require the C560 to turn L at the NDB(L)OX, for the outbound leg 280° of the hold and then inbound leg 100°. The AIP page AD 2-EGTK-8-1, requires that entry into the racetrack procedure for the NDB(L)DME runway 01, is restricted to Sector 3 entry from the inbound leg 100°M of holding pattern.



At 1326:39, radar recording shows the C560 overflying the Brize Norton CTR on a N'ly track, passing an altitude of 4600ft in the descent to 3500ft. As the C560 cleared the Brize Norton Zone, the ac turned onto a NE'ly track towards Oxford maintaining an altitude of 3500ft. Radar recording showed a number of intermittent contacts operating in the vicinity of Oxford which CAA ATSI considered to be gliders.

The Oxford controller was aware of the glider activity in the vicinity of Oxford. The controller indicated that on initial contact the C560 crew was informed about gliding activity in the area. The controller also mentioned that due to the good weather conditions, after the previous week of poor weather, there was an increased number of gliders operating in the area.

At 1328:48, the C560 was maintaining an altitude of 3500ft, on a NE'ly track and crossing the OX NDB, followed by a L turn into the holding pattern (outbound leg  $280^{\circ}$ ). At 1330:00, the C560 was W'bound in the entry procedure at 3500ft and passing 0.1nm N of a contact (This may have been the glider mentioned in the pilot's written description). The controller indicated that the pilot made no comment about gliders until later when outbound in the procedure.

At 1332:27, the C560 was outbound in the NDB(L)DME RWY01 procedure, 2.2nm SE of Oxford, at an altitude of 3100ft. Also shown are intermittent contacts 2.5nm ahead of the C560. The controller indicated that at this point, towards the end of the outbound leg, the C560 pilot had reported sighting gliders and had requested an earlier R turn for a visual approach, which was approved. The C560 turned early, passing NW of the unknown contacts.

When questioned the controller indicated an expectation that the pilot had resolved any potential conflict by turning in early on a visual approach. No further comment was made by the pilot and no Airprox report was filed at the unit.

The C560 was in receipt of a PS from Oxford Approach. CAP774 UK Flight Information Services, Chapter 4, Page 5, states:

'A Procedural Service is an ATS where, in addition to the provisions of a Basic Service, the controller provides restrictions, instructions, and approach clearances, which if complied with, shall achieve deconfliction minima against other aircraft participating in the Procedural Service. Neither traffic information nor deconfliction advice can be passed with respect to unknown traffic.

The controller shall provide traffic information, if it is considered that a confliction may exist, on aircraft being provided with a Basic Service and those where traffic information has been passed by another ATS unit; however, there is no requirement for deconfliction advice to be passed, and the pilot is wholly responsible for collision avoidance. The controller may, subject to workload, also provide traffic information on other aircraft participating in the Procedural Service, in order to improve the pilot's situational awareness.'

The Oxford controller provided TI on glider activity in the vicinity of Oxford airport, which most likely increased the C560 pilot's situational awareness and lookout for gliding activity.

The pilot's written report indicated that the C560 passed close to a glider whilst in the hold [see UKAB Note (1)] and the time of the radar recording (1330) correlates with the time of the reported Airprox. CAA ATSI considered it most likely that this was the glider (untraced), involved in the Airprox. The controller indicated that the pilot only reported sighting gliders when outbound in the NDB(L)DME RWY01 procedure and elected to turn R early, completing a visual approach in order to avoid the gliders.

The incident occurred when the C560 came into proximity with a glider operating in the vicinity of Oxford Airport. The Oxford controller passed TI about the glider activity in the area which most likely increased the pilot's situational awareness and lookout, resulting in the sighting of the glider, with appropriate action to resolve the conflict.

## PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilots of the C560XLS, radar video recordings, reports from the air traffic controllers involved and reports from the appropriate ATC authorities.

The Chairman expressed disappointment that the reported glider remained untraced, which left Members with only one side to the story. A pilot Member opined that transiting ac are squeezed by the Weston-on-the-Green Danger Area and the Brize Norton CTR and that the glider pilot was probably unaware of the OX holding procedure O/H Oxford aerodrome. Given that this encounter occurred in the Class G airspace of the Oxford AIAA, the pilots of both ac were responsible for maintaining their own separation from other traffic through see and avoid. Prior to its arrival in the O/H, the Oxford controller had alerted the inbound C560 crew to the presence of gliders in the area by passing a generic warning. Members were acutely aware of the difficulty faced by flight crews operating under IFR in meeting their responsibilities to maintain a good lookout when under a high workload, flying an instrument approach procedure where the procedure is not protected by CAS. However, the C560 crew only saw the glider as they turned outbound at the OX, estimating it passed 50m clear to their LHS which Members agreed was effectively a non-sighting and the cause of the Airprox. Without a report from the glider pilot, it was impossible to state whether the pilot had seen the C560 and taken avoiding action or the pilot may have been oblivious to the C560 and just been manoeuvring as it passed.

Without the incident being captured on radar and without a report from the glider pilot, Members pondered as to how much risk the incident carried. Some Members believed that, owing to the inherent difficulty of estimating distances, particularly when a brief encounter occurs, the separation may have been more than 50m when the ac passed, albeit safety was compromised. Others thought that the ac had passed by chance, with there being no time for the C560 crew to take avoiding action, where an actual risk of collision existed. In the end, on the limited information available, the Board concluded that luck had played a major part such that a definite risk of collision had existed.

## PART C: ASSESSMENT OF CAUSE AND RISK

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Cause:

Effectively a non-sighting by the C560XLS crew.

Degree of Risk: