

## AIRPROX REPORT No 2010045

Date/Time: 10 May 2010 1440Z

Position: 5140N 00105W (3nm N  
Benson - elev 203ft)

Airspace: MATZ/Oxford (Class: G)

AIAA

Reporting Ac      Reported Ac

Type: Puma                      Untraced Glider

Operator: HQ JHC              N/K

Alt/FL: 1900ft                  N/K  
(QFE 1006mb)

Weather: VMC CLBC            N/K NR

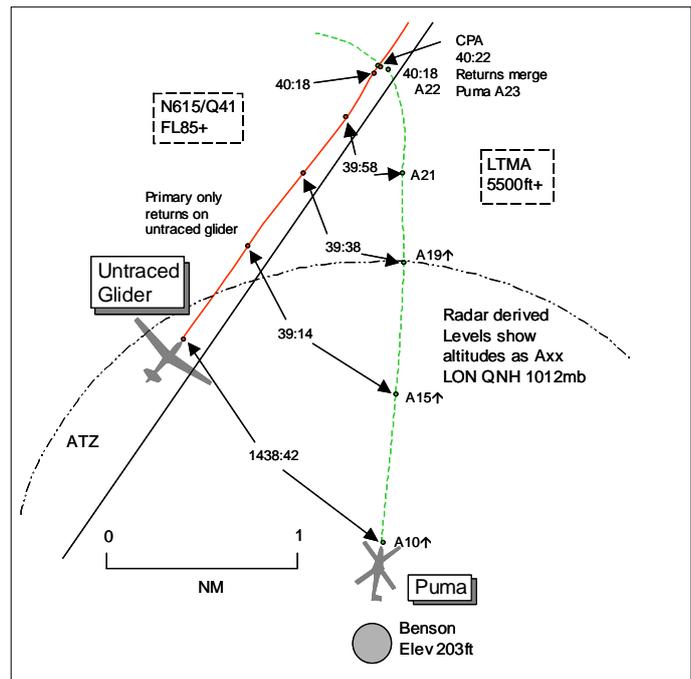
Visibility: 30km                NR

Reported Separation:

100-200ft V/Nil H NR

Recorded Separation:

returns merge



## PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

**THE PUMA PILOT** reports flying a local sortie from Benson and in receipt of a DS, he thought, from Benson Director, squawking 3610 with Mode C. The visibility was 30km flying 2500ft below cloud in VMC and the ac was camouflaged green with HISLs, nav and landing lights all switched on. After completing an overshoot from a PAR RW01 they were being re-positioned for a further approach, an ILS RW19. When commencing a level L turn on to heading 290° [actually 310°] at 1900ft QFE 1006mb and 100kt about 3nm N of Benson, iaw ATC instructions, the handling pilot in the LH seat spotted a glider out of the corner of his eye approaching from the LHS at the same level. He immediately initiated a rapid climb to avoid the glider which was seen to pass about 100-200ft below. He informed ATC that the glider was at 1900ft and 3nm on the extended C/L of RW01. He assessed the risk as high.

**RAC MIL** reports that despite extensive tracing action the identity of the glider remains unknown. The glider's primary only contact could not be tracked from a point of departure nor to a destination. Procedural tracing action through numerous gliding sites did not produce any likely gliders, so the reported ac remains untraced.

**THE BENSON DIRECTOR** reports acting as the screen controller for a trainee on consul for 1hr and 10min with a steady flow of radar training cct traffic. As the Puma was climbing out on RW track (RW01RH) for a PAR, the supervisor informed the trainee that the Puma could now have an ILS [previously requested] against the stream if required (RW19). The trainee instructed the Puma flight to climb to 1900ft QFE [1438:35] and then correctly spotted that the pilot had read back his instructions incorrectly. The trainee then called traffic [1439:39] i.e., R 1 o'clock 5nm crossing R to L 800ft above. The trainee then did some admin with the Puma [procedure minima and intentions] until the pilot called level and then turned the Puma onto 310° [1439:58] to position the ac for the ILS. Shortly after the turn the Puma pilot called visual [1440:18] with "...previously called traffic 3 o'clock 200ft below". The trainee replied that the traffic was not the ac he had called and that the ac was not visible on radar. The Puma pilot then told us that the ac he had seen was a glider. The trainee then correctly informed the Supervisor & Approach controller about the glider's approximate position and altitude and then continued to vector the Puma for its approach.

**HQ AIR ATM Safety Management** reports that the Puma was conducting IFR radar training in the Benson radar training cct under a TS from Benson DIR. After completion of a PAR, whilst repositioning for further approach, the Puma came into conflict with a glider. The TS was being provided using SSR only (primary radar was unserviceable). The controller was under low to medium workload and had called TI on an ac which was operating SSR shortly before the incident. SO2 SM Spt ATM believes the lack of primary radar at the time of the Airprox was the contributing factor in the incident. The glider was not displaying SSR at the time and was therefore not seen by Benson DIR. On initial report of the glider's proximity to Benson, the controller correctly reported this to the supervisor and other ac receiving a service from Benson ATC. RAF Benson has subsequently regained the primary Watchman radar.

**HQ JHC** comments that the lack of primary radar at the time of the Airprox meant that neither the controller nor the Puma were aware of the proximity of the glider in question. The glider demonstrated a lack of airmanship by flying through the extended centreline of a busy airfield without transponder or notifying ATC. It appears that the Puma was confused about previously notified traffic and may have been concentrating his lookout away from the direction of the conflicting glider. It is fortunate that the Puma eventually spotted the glider and took avoiding action.

UKAB Note (1): Analysis of the Heathrow 23cm and 10cm recorded radars, not available to Benson ATC, at 1438:42, when the Puma pilot acknowledges the trainee Director's climb, first shows the Puma 0.3nm N of Benson tracking 005° climbing though altitude 1000ft QNH 1012mb (800ft Benson QFE). At the same time a primary only return, the untraced glider, shows 2nm NW of Benson tracking 035° in the Puma's 1030 position. The subject ac continue on converging headings with separation reducing to 0.7nm at 1439:38, the time when the trainee Director passes TI to the Puma pilot on traffic to the NE. Separation reduces further to 0.4nm at 1439:58 when Director instructs the Puma flight to turn L onto heading 310°. As the Puma pilot's transmission starts, reporting his sighting of the glider, the ac as separated by <0.1nm before they merge 4sec later at 1440:22, the Puma indicating a climb of 100ft to altitude 2300ft QNH, in accord with the pilot's reported avoiding action.

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

Information available included a report from the Puma pilot, transcripts of the relevant RT frequencies, radar video recordings, reports from the air traffic controllers involved and reports from the appropriate ATC and operating authorities.

Members noted the glider's track, which had taken it close to the ATZ and converged with the FAT for Benson's main RW. Any pilot intending to pass close to or through a FAT should take into account the instrument approach path profile and endeavour to fly clear (above/below or laterally spaced) from it. Although the Puma flight was receiving radar vectors from Benson Director within the MATZ, the Puma crew, as well as the glider pilot, were required to maintain separation from other traffic through 'see and avoid' as the airspace was Class G. The glider pilot had not called Benson so it was unknown traffic. However the situation was further complicated owing to the reduced level of radar services as the primary radar was oos; the glider was not squawking so it was invisible to Director. Taking these points into account Members agreed that the cause of this Airprox had been a sighting issue. Considering the geometry, Members were surprised that the glider pilot had not filed a report. The Puma had approached it from behind and then turned, just before the CPA, to pass O/H the glider. There appeared to be no track deviation on the radar recording and the Puma crew made no mention of the glider manoeuvring during the encounter. On the balance of probability, Members surmised that the Puma had probably passed unsighted to the glider pilot. The Puma handling pilot, who was heads-in instrument flying, fortunately had seen the glider, albeit late, out to his L at the same level, and had immediately climbed to avoid it, watching it pass 200ft below and then diverge out to their R. One pilot Member thought that in the circumstances that pertained, with the Puma crew unaware of the glider's presence and the late sighting, safety had been compromised. This view was not shared by the majority who believed that the visual sighting and prompt actions taken by the Puma crew had been enough to remove any risk of collision.

**PART C: ASSESSMENT OF CAUSE AND RISK**

Cause: A probable non-sighting by the glider pilot and a late sighting by the Puma crew.

Degree of Risk: C.