

## **AIRPROX REPORT No 2013112**

**Date/Time:** 14 Aug 2013 1456Z

**Position:** 52 13N 000 04E  
(7nm NE of Gransden Gliding Site)

**Airspace:** London FIR (Class: G)

**Reporting Ac** **Reported Ac**

**Type:** Ventus 2CT PA31 Navajo

**Operator:** Civ Pte Civ Comm

**Alt/FL:** 2000ft 2500ft  
QNH (NR hPa) QNH (NR hPa)

**Weather:** VMC CLBC VMC CLBC

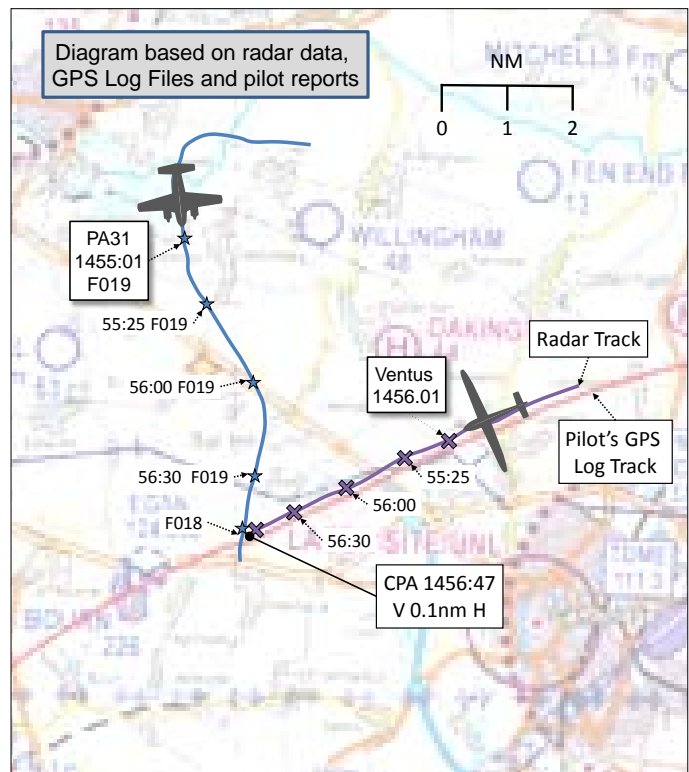
**Visibility:** 20nm 10km

**Reported Separation:**

0 ft V/100m H NK V/NK H

**Recorded Separation:**

NK V/0.1nm H



## **PART A: SUMMARY OF INFORMATION REPORTED TO UKAB**

**THE VENTUS PILOT** reports flying a white glider, VFR in VMC, equipped with FLARM, flying at 100kt and 2000ft amsl, heading 243°, descending on 'final glide' to Gransden Lodge glider site, when he saw the PA31 'appear' in front of his glider. The PA31 approached from his 4 o'clock but he did not see it until it was in his 1 o'clock; he executed an immediate dive, which was aggressive enough to cause him to hit his head on the canopy, and estimated that the aircraft were within 1 or 2 sec of colliding with a minimum separation of 0ft V and 100m H.

He assessed the risk of collision as 'Very High'.

**THE PA31 PILOT** reports flying as a single-pilot crew, with another person on board, in a blue and white aircraft, VFR in VMC, with wingtip and rear HISLs<sup>1</sup> turned on, and squawking transponder Modes 3/A, C and S. He was operating in the Cambridge area under a Traffic Service from 'London Mil' and planned to transit south below controlled airspace. The pilot recalls receiving a descent clearance from London Mil, carrying out a 'spiral descent' to the north of Cambridge airport, levelling at 2500ft AMSL initially, and then heading south. London Mil handed him over to Luton Radar but the pilot does not recall receiving any Traffic Information from Luton, and did not see the Ventus at any point.

### **Factual Background**

The weather at Cambridge Airport at 1450 and 1520 was reported as:

METAR EGSC 141450Z 20009KT 140V260 9999 SCT048 23/12 Q1021=  
METAR EGSC 141520Z 21009KT 160V240 9999 SCT048 23/11 Q1021 =

Because the aircraft were converging, the Rules of the Air require the PA31, as the powered aircraft, to give way to the Ventus glider<sup>2</sup>.

<sup>1</sup> High Intensity Strobe Lights

<sup>2</sup> Rules of the Air 2007 (as amended), Rule 9 (Converging)

## Analysis and Investigation

### UKAB Secretariat

The Ventus pilot submitted his GPS tracker log, which correlates closely with the radar recording, and helped to identify his primary radar track.

### Military ATM

LATCC(Mil) were controlling the PA31 under a Traffic Service until 1454:19 and the Airprox occurred at 1456:50; the pilot was using a LATCC Northeast frequency but was allocated a LATCC East Mode 3/A squawk of 6060. All heights/altitudes quoted are based upon SSR Mode C from the radar replay unless otherwise stated.

Traffic Information was passed to the PA31 pilot on two tracks at 1449:19 and 1449:32; neither of the tracks are believed to be the Ventus, and the radar replay shows multiple other slow-moving tracks in the vicinity. The PA31 pilot requested, '*[PA31 callsign] I'd like to route via Cranfield and then down the western side of the TMA.*' At 1454:07 the LATCC controller replied, '*[PA31 callsign], roger, if you route towards Brookmans Park initially and continue with Luton Radar 129.55. Make that request with them*'; at the same time the Ventus is believed to be 6.1nm southeast of the PA31 as highlighted in Figure 1. At 1454:19, the PA31 confirmed the routing and frequency change. No Traffic Information was given at the time of transfer and no instruction was given to change squawk.

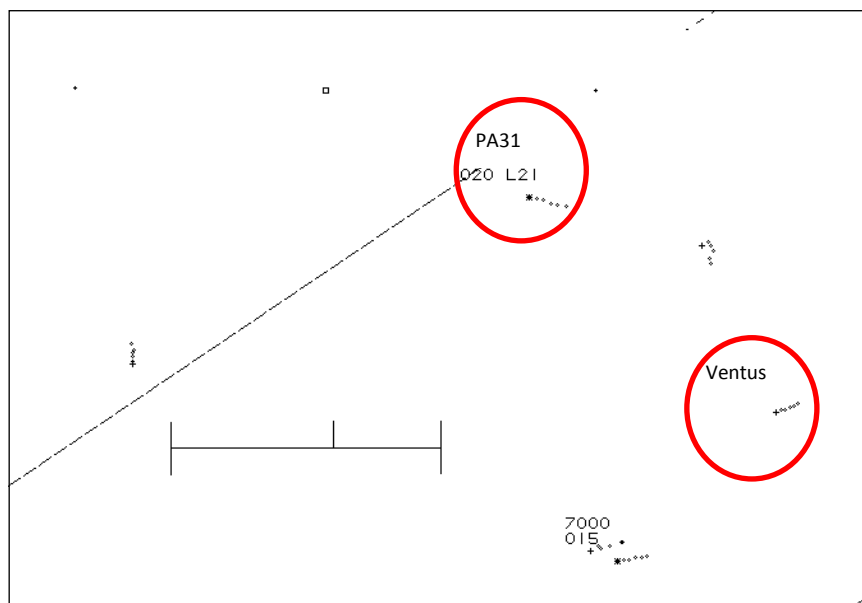


Figure 1: PA31 at 1454:07 when instructed to continue with Luton.

LATCC Mil were not aware of the Airprox as neither of the pilots were on frequency or receiving an Air Traffic Service at the time of the incident. As a result, no Occurrence Reporting was initiated and accurate information on the traffic situation or the controller's intentions are not available. It is also impossible to assess how accurately the radar replay represents the display that the controller had selected at the time.

Given the aspect of the two aircraft, it is reasonable to conclude that the controller did not pass Traffic Information to the PA31 pilot either because the radar tracks were not in conflict at the time he transferred the pilot to Luton, or because the glider was not shown on the controller's radar display.

## ATSI Investigation

At 1455:11 the pilot of the PA31 was 7.4nm north-northeast of Gransden Lodge and contacted Luton Radar routing towards Brookmans Park. The PA31 was identified and a Traffic Service was agreed.

At 1455:30 the Luton Radar controller advised the PA31 of unknown traffic in the pilot's 11 o'clock position, 4nm away, left to right with no height information (Figure 2). The PA31 pilot replied that they were looking.

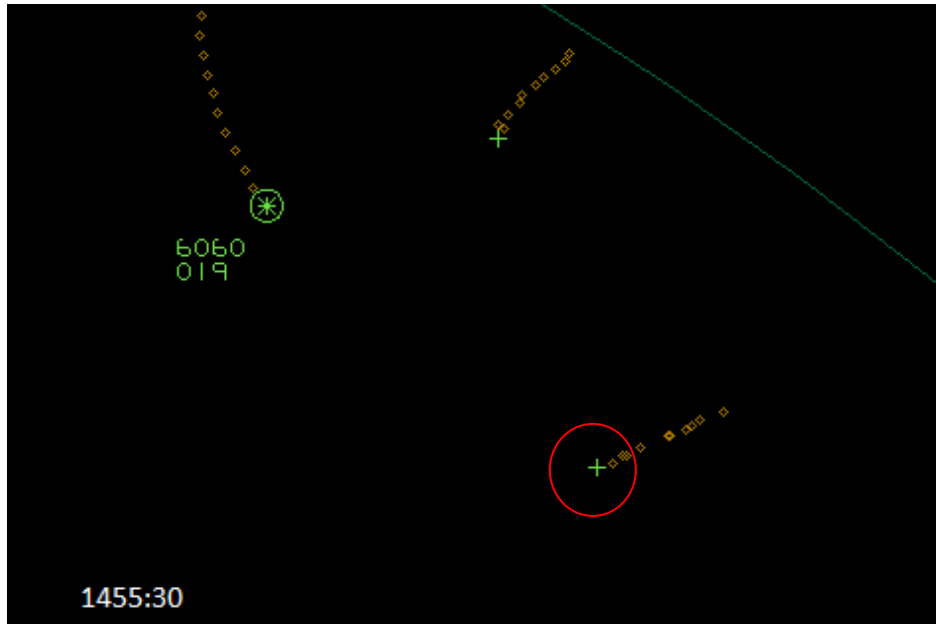


Figure 2

The tracks of the two aircraft continued to converge until the PA31 passed ahead of the primary contact (Figures 3, 4 and 5).

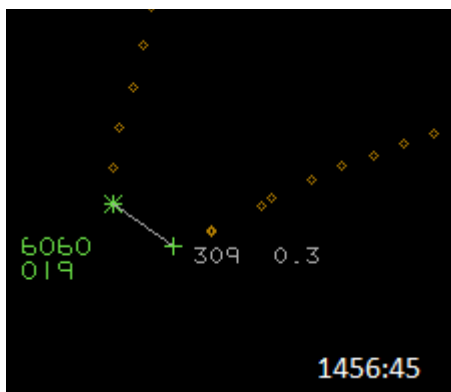


Figure 3



Figure 4

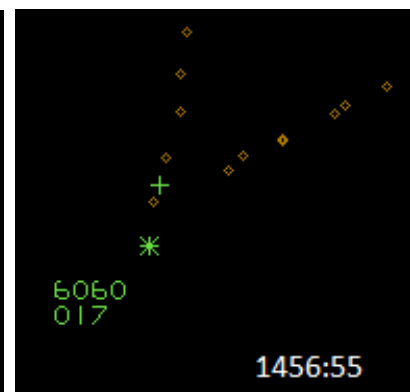


Figure 5

Although it is not possible to identify the glider positively on radar, the time, position and geometry of the Airprox reported by the glider pilot match the incident displayed above.

CAP774, the UK Flight Information Services, Chapter 3, paragraph 5 states that, under a Traffic Service, the controller shall pass traffic information on relevant traffic, and shall update the traffic information if it continues to constitute a definite hazard, or if requested by the pilot. The Luton Radar controller passed traffic information on the primary contact believed to be the glider. Without height information the controller could not determine if the contact constituted a definite hazard and further information was not requested by the pilot. The glider was not in receipt of an Air Traffic Service.

## Summary

An Airprox was reported by the pilot of a Ventus-2CT glider when it came into conflict with a PA31 approximately 5nm northwest of Gransden Lodge glider site in Class G airspace.

### **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, reports from the air traffic controllers involved, and reports from the appropriate ATC authorities.

The Board first considered the actions of the pilots. It was clear that, despite the Traffic Information from the Luton controller, the PA31 pilot had not seen the Ventus; some members speculated that this may have been because his aircraft was slightly higher than the glider and so his view of it may have been obscured. On the other hand, the Ventus pilot reported making an immediate descent when he saw the PA31 ahead of him; one of the glider pilot members informed the Board that the manoeuvre would have had an immediate effect in this type of glider, but it was probably too late to significantly increase separation.

The Board then considered the actions of the air traffic controllers; they noted that the PA31 was not in conflict with the Ventus when the PA31 pilot left the LATCC Mil frequency, and that the Luton controller passed him appropriate Traffic Information on the radar track that corresponds with the glider's GPS track. The Board concluded that the air traffic controllers had taken appropriate actions in the circumstances.

The Rules of the Air required the PA31 pilot to give way to the Ventus. The Board's debate on the cause therefore initially explored the reason for the PA31 pilot flying into conflict with the Ventus. However, having not seen the Ventus, the PA31 pilot could not reasonably be expected to conduct an avoiding manoeuvre; therefore, the Board agreed that the cause was a simple conflict in Class G airspace. When discussing the associated degree of risk, the Board noted that neither pilot had seen the other aircraft in time to take effective avoiding action: they therefore agreed on a risk category of A; a situation that had stopped short of actual collision, where separation was reduced to a minimum, and where chance played a major part in events.

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

Cause: A conflict in Class G.

Degree of Risk: A

ERC Score<sup>3</sup>: 100

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<sup>3</sup> 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.