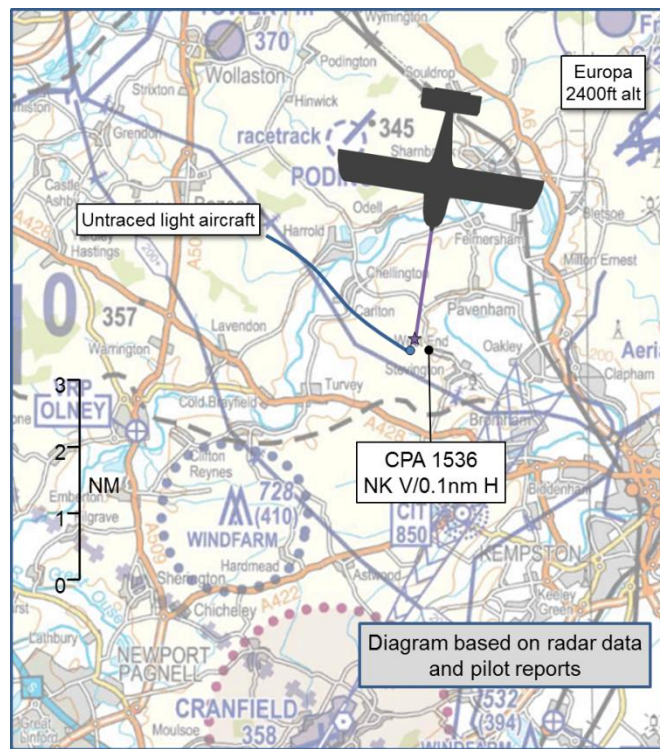


**AIRPROX REPORT No 2014158****Date/Time:** 31 Aug 2014 1536Z (Sunday)**Position:** 5210N 00034W  
(7nm NNE Cranfield)**Airspace:** Lon FIR (Class: G)**Aircraft 1**                      **Aircraft 2****Type:** Europa                      NK**Operator:** Civ Pte                      Unknown**Alt/FL:** 2400                      NK  
QNH (1015hPa)**Conditions:** VMC                      NK**Visibility:** >10km**Reported Separation:**

50-60ft V/0ft H                      NK

**Recorded Separation:**

NK V/0.1nm H

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

**THE EUROPA PILOT** reports flying a white aircraft; he did not report which lights were illuminated. The transponder was selected with Mode 3A and C, and the aircraft was not fitted with TCAS. As he approached the Cranfield overhead he spotted another aircraft 200-300yds ahead, just in front of the starboard wing-tip, he immediately told the PF to turn left and they initiated a left turn of 90°. The left turn was to offer a larger profile in an attempt to get the other pilot to see him, as well as reduce the closing speed. The other aircraft appeared to fly 50-60ft directly beneath them; it was a home-built type of tail-dragger and the pilot surmised it may have come from the LAA rally at Sywell. Once clear they did a 360° turn to get back on track. The encounter was “too close for comfort” but he didn’t report it to Cranfield at the time because he could hear another aircraft on the ILS at Cranfield and was busy looking for this aircraft, and thinking about the incident that had just happened.

He assessed the risk of collision as ‘High’.

**THE PILOT** of the other aircraft could not be traced.

**Factual Background**

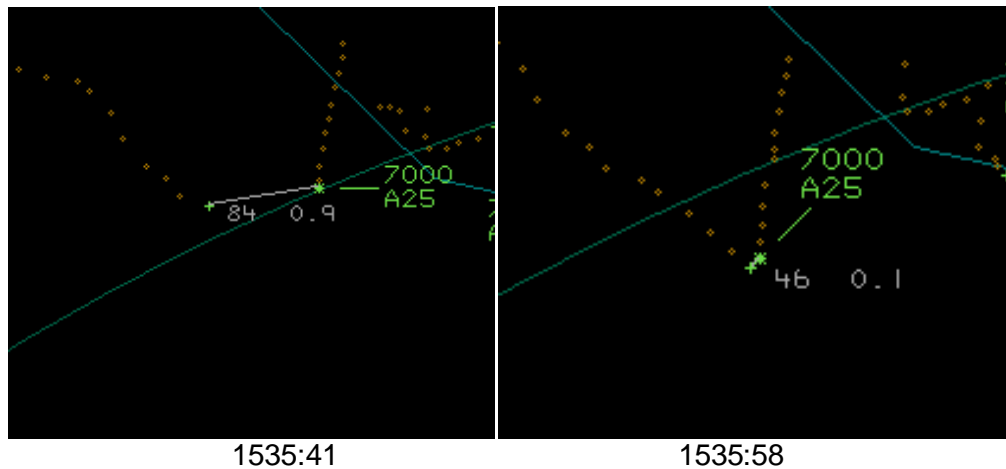
The weather at Cranfield was reported as:

METAR EGTC 311520Z 31007KT 9999 SCT045 20/12 Q1018

**Analysis and Investigation****CAA ATSI**

The Europa contacted Cranfield Approach at 1533:55 stating that they were 12nm north of Cranfield at 2500ft, and requesting to fly through the overhead. A Basic Service was agreed and the Europa was instructed to call 3nm from the overhead. Traffic information was passed on traffic not involved in the Airprox. Cranfield Approach provides the service without the aid of surveillance equipment. The pilot of the Europa described the Airprox as happening at 020° approx 7nm from CFD VOR (withdrawn in 2013 but was still situated on the airfield). When the Europa was 7nm from the airfield an unknown primary return could be observed from the area

radar recording on the right hand side of the Europa (Figure 1, 1535:41). The two aircraft converged, and at 1535:58 were 0.1nm apart (Figure 2). The Europa passed behind the unknown primary return and did not report the incident to Cranfield.



### UKAB Secretariat

Both pilots shared an equal responsibility for collision avoidance and for not flying into such proximity as to create a danger of collision<sup>1</sup>. The geometry was a 'converging' situation so the Europa pilot was required to give way<sup>2</sup>, which he did.

### Summary

An Airprox was reported on 31 Aug 2014 at 1536 when a Europa flew into conflict with an untraced light aircraft at 2400ft. The Europa was receiving a Basic Service from Cranfield who were operating without radar; the other aircraft could not be traced. The unknown aircraft was not transponding, so the actual CPA is not known; the radar replay indicated the horizontal separation was 0.1nm or less.

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

Information available included reports from the pilot of the Europa and radar video recordings.

With a dearth of information regarding the second aircraft, the Board could only note the circumstances of the incident and regret the fact that Cranfield weren't using radar and so were unable to give the Europa pilot any Traffic Information. The Board then discussed whether the Europa pilot could have climbed rather than turned to increase separation, but accepted that because this was obviously a late sighting, the pilot instinctively did what he thought best at the time. Recognising that he was conducting other tasks at the time of the Airprox, the Board commented that it was unfortunate that the Europa pilot didn't report the Airprox to Cranfield at the time because this may have helped with the subsequent tracing action of the other pilot and thereby allowed a fuller analysis to be made of the circumstances.

In discussing the cause, the Board found it difficult to assess whether the untraced pilot had seen the Europa or not, but judged that the lack of change in heading on the radar picture probably indicated that he did not. Both pilots were entitled to be where they were, and see-and-avoid was the main barrier to prevent a collision; therefore, it was agreed that the cause of the Airprox was a late sighting by the Europa pilot and a probable non-sighting by the light aircraft pilot. With 0.1nm or less horizontal separation, and an unknown height separation, the Board assessed that although the Europa had taken action to prevent a collision, safety margins had been much reduced below the normal. They therefore assessed the risk as Category B.

<sup>1</sup> Rules of the Air 2007 (as amended), Rule 8 (Avoiding aerial collisions).

<sup>2</sup> *ibid.*, Rule 9 (Converging).

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

Cause: A late sighting by the Europa pilot and a probable non-sighting by the light aircraft pilot.

Degree of Risk: B.

ERC Score<sup>3</sup>: 20.

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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.