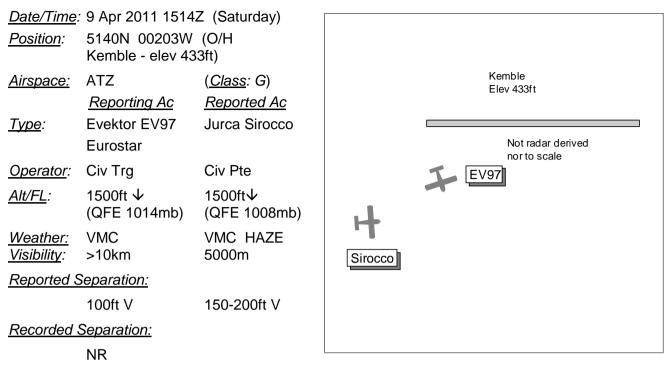
## AIRPROX REPORT No 2011032



#### **BOTH PILOTS FILED**

## PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE EVEKTOR EV97 EUROSTAR PILOT reports flying a dual test flight with a PPL holder for revalidation of a NPPL, VFR and in communication with Kemble. The visibility was >10km in VMC. The PF joined O/H for RW08 from the W at 2000ft QFE 1014mb and at the midpoint made a gentle turn 30° R starting a descent. On realising his mistake the PF straightened out, climbed back to 2000ft and correctly turned L with the cct pattern, first over the live-side - where they encountered a Cessna inbound from the NW about 200ft higher - before then crossing the RW08 numbers as per CAA recommendation and starting a descent at 80kt. Their lookout to the W was into sun but in any event they did not see the Sirocco until it passed; it was almost certainly in a blind spot under their starboard wing. Looking up at the Cessna above to see how it was going to join they saw the Sirocco as it flashed past about 100ft below and a little behind their ac on a heading of 060°, close enough to give them a fright. At the time they were about 1500ft QFE in a gentle L turn descending deadside to cross the RW26 threshold numbers at cct height. He reported the 'Airmiss' to Tower. The Sirocco appeared to climb to 2000ft and proceeded to fly a wide LH cct outside the ATZ, for as they approached the end of the downwind leg the Sirocco was so far away he thought it was flying away. Afterwards, on reflection, both he and his student thought at the time that the Sirocco was a large ac (he commented that it looks like a Space Shuttle); perhaps this was a trick of the bright sunlight, so that his perception of the Sirocco's wide cct was a misjudgement. He thought the Sirocco pilot went straight into a large LH pattern after going through the O/H, intending to join at cct height 1000ft. He opined that he emphasised in training the importance of accurate flying in the ATZ, a FREDAH check on approach, confirmation of the QFE and joining O/H at 2000ft or in line with this and other standard procedures. Also a greater emphasis on listening out on the radio for the position of other traffic and on lookout for this and any other traffic.

**THE JURCA SIROCCO PILOT** reports flying solo inbound to Kemble VFR and in communication with Kemble on 118-9MHZ with transponder switched off. The visibility was 5000m in haze in VMC and the ac was coloured white/green with no lighting fitted. Whilst joining for RW08 directly from the W descending on the deadside through 1500ft QFE 1008mb heading 090° at 120kt the other ac was not seen until it crossed above his flightpath from L to R by 150-200ft with minimal horizontal separation, too late to take avoiding action. He assessed the risk as high.

**THE KEMBLE FISO** reports on duty in the VCR when an Airprox was reported at 1515Z by the pilot of an EV97 Eurostar against a Jurca Sirocco. Both ac were joining via the O/H for RW 08LH in good VMC conditions (+10km, FEW 040, QFE 1014 [actually 1008mb]). Aerodrome traffic levels were light with 3 ac joining, 1 outbound VFR SE'ly and 1 pending departure. The Sirocco was the third of the 3 ac to request join and was given relevant TI on cct and joining traffic. At the time the Airprox was reported the EV97 was over the RW heading S and descending crosswind towards the deadside. The Sirocco was seen to join straight down the RW (heading 080°) at a level slightly below the EV97. The Airprox was witnessed by the second FISO (on duty as VCR Assistant) who mentioned, a few moments before the Airprox was reported, that separation appeared to be compromised.

The pilot of the Sirocco was later interviewed by the Operations Manager later in the day who confirmed that he had not seen the Eurostar until after they had passed. The pilot of the EV97 confirmed that he was submitting an occurrence report to the CAA for investigation. Both pilots were reminded of the need for care to be taken whilst flying in the cct and in particular to joining at the correct heights.

**ATSI** reports that the Airprox was believed to have occurred at 1514, within the ATZ at Kemble Airport, which consists of a circle, radius 2nm, centred on RW08/26 and extends to 2000ft above the aerodrome elevation (436ft).

The Airprox was reported by the pilot of an EV-97 Eurostar Microlight operating on a local detail from Kemble. The second ac was a Jurca Sirocco, inbound to Kemble from Badminton.

A FISO service was provided at Kemble. Traffic levels were reported as light with RW08 in use.

CAA ATSI had access to RT recording and radar recording provided by NATS Swanwick, together with written reports from both pilots and the FISO.

Although not a requirement, Kemble do provide an RT recording facility, but on this occasion the recorder failed to record time signals. The transcription was therefore aligned to the time of the Airprox occurrence at 1514 UTC.

The FISO reported the weather conditions as good VMC (+10km FEW040). The written reports from the EV97 pilot and FISO indicate that the QFE was 1014, however the RT transcript and ATSU confirm that the QFE was 1008. The weather for Lyneham is provided; METAR EGDL 091450Z 09010KT 9999 FEW045 BKN300 19/09 Q1023 BLU NOSIG=

At 1508:40, the EV97 pilot called Kemble Information and reported, "(EV97)c/s returning from the west approximately four miles out for an overhead join." The FISO replied, "(EV97)c/s report overhead er for runway zero eight lefthand the Q F E one zero zero eight one aircraft descending deadside one aircraft joining from the northeast." The EV97 pilot acknowledged, "QFE one zero zero eight for zero eight left hand (EV97)c/s."

At 1509:23, the Sirocco pilot called, "(Sirocco)c/s is returning to you from Badminton present position five miles west of the field at two thousand feet er request joining instructions over." The FISO replied, "(Sirocco)c/s Runway zero eight the Q F E is one zero zero eight er circuit traffic is about to report downwind er I've got one joining from the northeast one other aircraft joining from the west." The Sirocco pilot responded, "(Sirocco)c/s runway zero eight lefthand Q F E one zero zero eight."

At 1511:23, the EV97 pilot reported O/H.

At 1512:35, the FISO advised another flight that was climbing towards the O/H before setting course, "....look for traffic in the overhead descending deadside and traffic joining from the west via the overhead."

At 1513:39, the Sirocco pilot reported O/H and the FISO advised, "(Sirocco)c/s one aircraft low over the piano keys one aircraft established base leg." The Sirocco pilot replied, "Roger" and the FISO added, "I've got one other Eurostar reported in the overhead unsighted to me."

At 1514:00, the EV97 pilot reported the Airprox, *"Er Kemble (EV97)c/s descending deadside I'd just like too report an Airmiss with the traffic going e-west to east at about fifteen hundred feet."* This was acknowledged by the FISO followed by a crossed transmission believed to be to the Sirocco, *"Gol..... for zero eight."* The Sirocco pilot acknowledged the call with *"Roger."* 

The FISO's written report indicated that EV97 was O/H the RW heading S and descending towards the deadside and the Sirocco was observed to join straight down the RW heading 080°.

The EV97 pilot's written report indicated that the EV97 ac was at a height of 1500ft and the Sirocco was 100ft below.

Using the radar recording it was not possible to identify the ac concerned or the occurence itself; however, at 1514:12, radar recording shows three contacts in the Kemble overhead. One contact is crossing the threshold area of RW08 tracking S and another contact is tracking  $085^{\circ}$  and positioned 0.5nm S of the RW.

At 1517:32 the FISO asked the EV97 pilot, "....confirm visual with the er Sirocco." The EV97 pilot responded, "Is er that the aircraft on and extremely wide left base over." This FISO advised, "affirm" and the EV97 pilot confirmed the Sirocco was the ac involved in the Airprox.

The FISO provided information to both flights. The Manual of Flight Information Services, CAP410 Part B, Chapter 1, Page 1, Paragraph 2.1, states:

'The FISO has the following specific responsibilities:

a) issuing information to aircraft flying in the aerodrome traffic zone to assist the pilots in preventing collisions.

The written reports from both pilots indicated that they each sighted the other late.

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

Information available included reports from the pilots of both ac, transcripts of the relevant RT frequencies, radar video recordings, a report from the FISO involved and a report from the appropriate ATC authority.

With both the EV97 and Jurca Sirocco joining the cct, both crews were responsible for maintaining their own separation from other traffic through see and avoid. The EV97 pilot had reported approaching from the W to execute an O/H join and the FISO issued appropriate TI to aid their SA on other traffic, which included traffic joining from the NE, a Cessna. The Sirocco pilot had then called, also inbound from the W, and was given TI by the FISO, including that on the EV97. However, the Sirocco pilot did not declare his intentions of how he intended to integrate into the traffic pattern. After the EV97 pilot reported O/H the FISO informed departing traffic about the EV97 descending O/H and the Sirocco, which he believed was also joining via the O/H, the norm being a standard O/H join unless stated otherwise. About 1min later the Sirocco reported O/H and was told about the EV97 O/H but unsighted to the FISO. It was then that the Airprox occurred. Members sympathised with the EV97 pilot's predicament as he would not have been expecting the Sirocco to be joining as it did and unannounced, however Members agreed that both ac were still joining the cct to fit in with other traffic already established in the visual cct pattern. The EV97 crew were looking up at the Cessna above when the Sirocco was first seen as it passed slightly behind and 100ft underneath their ac, effectively a non-sighting and a part cause of the Airprox. The Sirocco pilot elected to join directly onto the deadside descending, only seeing the EV97 as it crossed from L to R 150-200ft above, with no time to take avoiding action, which Members agreed was effectively a nonsighting and the other part of the cause of the Airprox. It was clear that these 2 ac had passed each other by chance, neither pilot seeing each other's ac in time to affect the outcome, which led the Board to agree unanimously that an actual risk of collision had existed during this incident.

# PART C: ASSESSMENT OF CAUSE AND RISK

<u>Cause</u>: Effectively, non-sightings by the pilots of both ac.

Degree of Risk: A.