

AIRPROX REPORT No 2010072

Date/Time: 5 Jun 2010 1523Z (Saturday)

Position: 5148N 00001E (~2nm SE Ware)

Airspace: LFIR (Class: G)

Reporting Ac Reported Ac

Type: EV97 Eurostar Rutan Long-Ez

Operator: Civ Pte Civ Pte

Alt/FL: 850ft 1250ft
(QNH 1018mb)

Weather: VMC CLBC VMC CAVOK

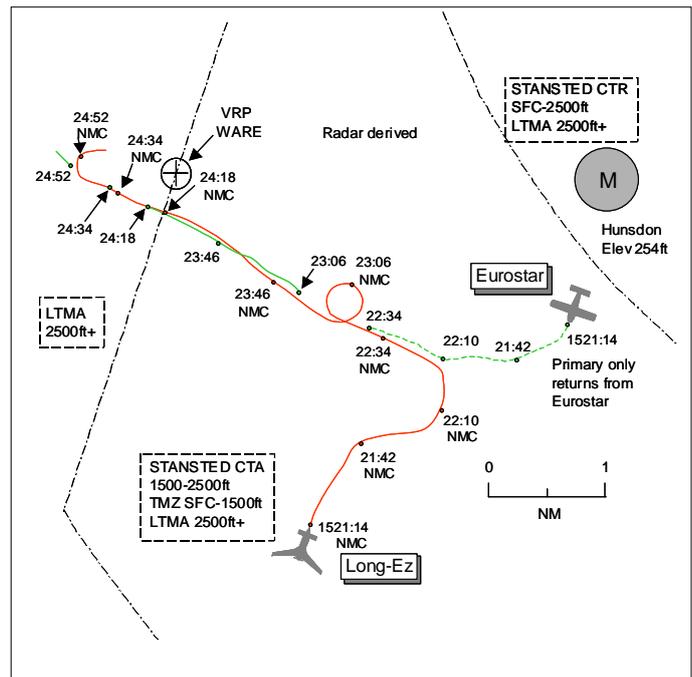
Visibility: 50km >10km

Reported Separation:

10ft V/50ft H 500ft V&H

Recorded Separation:

NR



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE EV97 EUROSTAR PILOT reports flying en-route from Hunsdon airfield [8nm SW Stansted] to Bourn VFR with another PPL-holder and listening out on the Microlight common frequency 129.825MHz; no transponder was fitted. The visibility was 50km flying 4000ft below cloud in VMC and the ac was coloured silver; no lighting was mentioned. He departed the cct to the S and on reaching the A414 he turned R onto heading 290° at 80mph. He was cruising at 850ft QNH 1018mb to comply with the TMZ entry/exit rules for non-transponder fitted ac into and out of Hunsdon. After turning onto heading 290° he handed over control to the other pilot for the rest of the flight. Some 3min later he suggested that they could track to the N of Ware, 10° R turn needed, or continue on their present track routing to the S. The PF elected to continue on track negating the need to turn. Some 15sec later they were overtaken by a very fast white coloured Rutan Long-Ez on their starboard side, about 10ft above and 50ft distant; its speed well over 110mph. The Long-Ez then made a climbing R turn and disappeared behind them. A few minutes later the same ac returned and flew alongside about 100ft away at the same height before it rolled L then R and then did a climbing R turn away, departing to the NE. He thought he might see the ac's registration letters but although he could see the whole underside of the Long-Ez no markings were visible. He was concerned that had they turned when he suggested they would certainly have been hit by this ac. He assessed the risk as high.

THE RUTAN LONG-EZ PILOT reports flying a local sortie from North Weald VFR and monitoring the Farnborough frequency 132.8MHz and Essex Radar on 120.625MHz squawking 7010 [aerodrome traffic pattern conspicuity code] with NMC. The visibility was 10km in CAVOK VMC and the ac was coloured white; no lighting was mentioned. To the W of Stansted CTR whilst under the CTA stub and within the TMZ flying at 1250ft and 125kt he saw an Evektor Eurostar tracking NNW'ly about 3-4km ahead. He believed he recognised this ac as one owned by pilots/CFIs, with whom he had flown, from a local airstrip. He overtook the silver coloured Eurostar to the R and above it, separated by 500ft, and was visual contact with it throughout. He orbited to their R, having slowed down on the first pass to 90kt, he passed the Eurostar again for a second time to their R, again by 500ft or more. He believed there was never a risk of collision but he may have startled the Eurostar pilot as he approached from behind and above. Even if the Eurostar pilot had commenced rapid manoeuvring, his vertical and horizontal separation was sufficient to maintain a good margin of safety between them. He contacted Essex owing to traffic density and because his track took him over Hunsdon and

right up to the CTR boundary and was given an assigned squawk 0202 but was not informed of an Airprox being filed; the Eurostar flight was not heard on any of the local frequencies. He opined that given the restrictions within the TMZ flying below 1500ft and the proximity of Luton and Stansted CTRs and with multiple ac and powered paragliders known to operate, this area is very restricted. He is investigating the fitting of a small TCAS system and to upgrade to Mode S to perhaps avoid such incidents from occurring as well as making his presence known to other flights by monitoring microlight frequencies used in the Ware area.

ATSI comments that the Essex Radar frequency was analysed and the Long-Ez pilot called at 1535:50, just over 12min post Airprox, stating he was on squawk 7010 at 1000ft in the Stansted stub near to Hunsdon inbound to N. Weald. The controller issued a discrete code for identification purposes and then informed the pilot that with only Mode A he should have called for transit of the TMZ. The pilot was then told to squawk 7010 and to contact N. Weald.

UKAB Note (1): The ANO Rules of the Air Regulations 2007 Rule 8 Avoiding aerial collisions Para (2) states, 'An aircraft shall not be flown in such close proximity to other aircraft as to create a danger of collision.' (3) 'Subject to sub-paragraph (7) [not applying to police ac], an aircraft shall not fly in formation unless the commanders of the aircraft have agreed to do so.'

UKAB Note (2): The recorded radar does not capture the CPA as the EV97 Eurostar fades from radar; however, the geometry of the encounter can be verified. At 1521:14 a primary-only return, believed to be the Eurostar, is seen 1.25nm S of Hunsdon tracking 190° whilst the Long-Ez is 2.75nm to its SW, squawking 7010 NMC tracking 030°. The Eurostar then commences a R turn and by 1521:42 is seen tracking W'ly whilst the Long-Ez is turning R onto a track of 080°, separation 1.5nm. At 1522:10 the Long-Ez is seen to be turning L through 350° with the Eurostar in its 11 o'clock range 0.4nm tracking 295°. The Long-Ez then turns onto a similar heading and closes to 0.2nm behind the Eurostar before the Eurostar fades after the radar sweep at 1522:34. Just over 30sec later the Long-Ez is seen turning in an orbit through heading 100° 1.8nm SE of Ware VRP when the Eurostar reappears on radar tracking 295° 0.4nm to its W. The Long-Ez rolls out onto a similar track to that of the Eurostar and closes to 0.2nm at 1524:18. The Eurostar fades for 3 radar sweeps, re-appearing as a pop-up contact at 1524:34 in the Long-Ez's 12 o'clock range 0.1nm. Thereafter the Eurostar fades again before it appears again at 1524:52 still tracking 295° whilst the Long-Ez is turning through heading 030° just over 0.1nm to its NE. From there the Long-Ez diverges to the NE before tracking SE'ly towards North Weald.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilots of both ac, copy CD of the relevant RT frequencies, radar video recordings and a reports from the appropriate ATC.

It was noted that the Long-Ez pilot did not comply with the requirements for entry into the TMZ. Listening out was of no use; a positive call to either Farnborough or Essex/Stansted was required, as the ac was not fitted with Mode C. However, this element had not contributed to the Airprox. The EV97 pilot was complying with the exemption granted to ac operating to and from Hunsdon. Members expressed concern that the Long-Ez pilot had, on the spur of the moment, elected to carry out a close fly-past of the Eurostar, believing he knew the pilot onboard. An experienced pilot Member opined that making a snap decision in the air without any pre-planning or prior consideration of the potential hazards was poor airmanship and a recipe for unforeseen consequences to fall out of the actions taken. This manoeuvre had undoubtedly startled the Eurostar pilot as the Long-Ez had approached unseen from behind and passed close-by with a faster airspeed. The opportunity was there earlier for the Eurostar pilot to see the Long-Ez, when the ac were approaching each other on opposite direction tracks but, for whatever reason, Long-Ez's initial approach from the SW went unnoticed. Although the Eurostar pilot was concerned about the Long-Ez pilot's manoeuvres, Members agreed that the Long-Ez pilot was always in a position to manoeuvre his ac further away should it be necessary, which allowed the Board to conclude that any risk of collision had been effectively removed.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: The Long-Ez pilot flew close enough to the Eurostar to cause its pilot concern.

Degree of Risk: C.