

## AIRPROX REPORT No 2011096

Date/Time: 26 Jul 2011 0954Z

Position: 5303N 00050W (3nm  
ENE of Syerston - elev  
228ft)

Airspace: Lincolnshire AIAA (Class: G)

Reporting Ac      Reported Ac

Type: Vigilant MG      Europa

Operator: HQ Air (Trg)      Civ Pte

Alt/FL: 2000ft      2300ft  
QFE (1008mb)      QNH (1016mb)

Weather: VMC CLBC      VMC CLBC

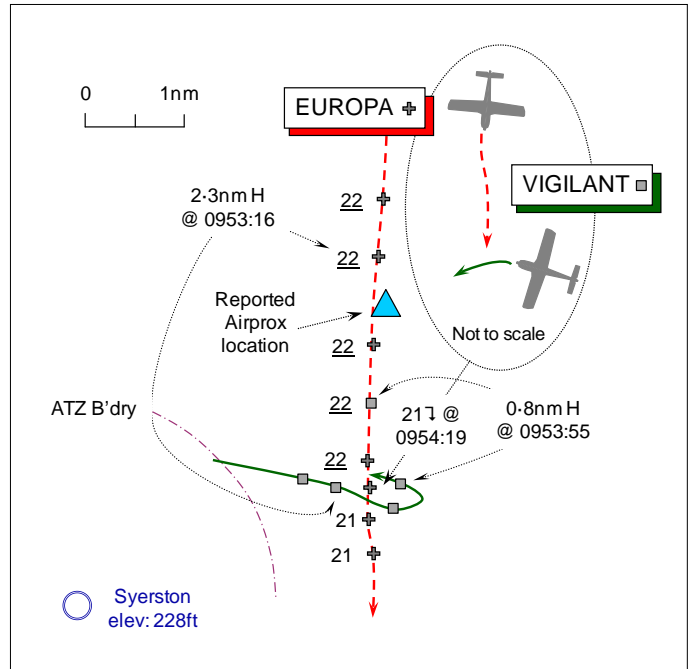
Visibility: 30km      >10km

Reported Separation:

50ft V/50m H      50ft V/50m H

Recorded Separation:

Not recorded



## PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

**THE VIGILANT MOTOR GLIDER (MG) PILOT**, a gliding instructor, reports he was conducting an elementary glider training sortie with an Air Cadet from Syerston and was in communication with Syerston RADIO on 125.425MHz. A squawk of A7000 was selected; neither Modes C, S nor TCAS are fitted. The MG is coloured white with red flashes on the fuselage/wingtips and orange stripes on the mainplane. Strobe lighting, navigation lights and the landing lights were all on.

About 4nm NE of Syerston, heading 290°, during a straight and level cruise at 60kt at 2000ft Syerston QFE (1008mb), some 500ft clear below cloud, a low-wing single-engine light ac was sighted about 200m away to starboard in his 1 o'clock and about 50ft slightly below his MG. A L turn was initiated to avoid the conflicting ac – the Europa – that maintained straight flight throughout and passed some 50m away and 50ft below his Vigilant. He assessed the Risk as 'high'.

**THE EUROPA PILOT** reports he was in the cruise on a VFR flight from Sandtoft to Redhill; his next waypoint was Wycombe Air Park. He was in receipt of a BS from Doncaster RADAR on 126.225MHz flying at an altitude of 2300ft QNH (1016mb). A squawk of A6160 was selected with Mode C; neither Mode S nor TCAS is fitted. There was a reasonably consistent cloud layer at around 2500ft so he was about as high as he could fly without being too close to the base of the layer. After passing Newark, approaching a position 3nm to the E of Syerston, heading 180° at 125kt, he noticed for the first time an ac at about the same level in his 10:30 position about 200m away, very close, on a converging track. He could see that there was a chance of collision and recognised that he was slightly below the other ac's altitude, so to avoid it he applied forward stick to decrease his altitude. A few seconds later he flew about 50ft under the other ac about 50m away, noticing that it was a predominantly white Vigilant MG. He did not notice any avoiding action taken by the Vigilant pilot and no lighting was observed on the MG; he assessed the Risk as 'medium'.

Resuming a level cruise, he asked Doncaster RADAR on the radio if they had seen the Vigilant, as they had not reported any traffic to him. The controller replied that he had not, but also stated that he had not been closely following his track as he was only under a BS. He made no further comment and proceeded en-route.

He remarked that he would hope to have sighted the Vigilant earlier, but it certainly demonstrated to him the difficulty of picking up a white ac against a predominantly white sky. In theory, he believes that he had 'right-of-way', but his instinct was to push forward as he was already slightly lower than the Vigilant. As for the BS, he thinks in the future he will always ask for TS; in the past he has done this but it has so often been downgraded to a BS that his habit has become to only ask for BS in the first instance. This had not worried him unduly as he has often had conflicting traffic reported to him, even under a BS, although he understands that this is at the controller's discretion. He has reported this Airprox as a 'medium' Risk, though if he had either not sighted the ac at all or not taken avoiding action then he would have put it down as 'high'. He would be interested to learn if the pilot of the Vigilant MG had seen his ac and taken avoiding action as he did not notice any and also if the other ac was squawking Mode C.

**ATSI** regrets that due to an error in the request process from ATSI, the RT recording from Doncaster RADAR is not available for the period of the Airprox.

The pilot of the Europa was in receipt of a BS from Doncaster RADAR and his written report indicates that he asked Doncaster if they had seen the other ac. The controller responded that he had not, adding that he had not been following the track of the Europa. CAP744 states:

A controller may identify an aircraft to facilitate co-ordination or to assist in the provision of generic navigational assistance, but is not required to inform the pilot that identification has taken place.

*Identification of an aircraft in receipt of a Basic Service does not imply that an increased level of service is being provided or that any subsequent monitoring will take place. Controllers may allocate SSR codes to aircraft in receipt of a Basic Service. The issuance of such a code does not constitute the provision of a surveillance service.*

On the basis of the information available, ATSI is not able to process a formal report.

ATSI have identified an issue with processing procedures and have taken steps to ensure that a similar error does not recur.

UKAB Note (1): The UK AIP at ENR 2-2-2-4, notifies the dimensions of the ATZ at the government aerodrome of Syerston as a circle of radius 2nm, centred on RW07/25, extending from the surface to 2000ft above the aerodrome elevation of 228ft. An Air/Ground Communications Service is provided, C/S Syerston RADIO on 125.425 MHz, which is active in summer from 0730UTC to Sunset.

UKAB Note (2): Analysis of the LAC Debden and Claxby radar recordings is somewhat inconclusive as this Airprox is not shown clearly. The Europa, shown squawking A6160 and identified from following the track to Redhill, maintains a level cruise at 2200ft (1013mb) as it tracks S passing the Airprox location reported by the Vigilant pilot just after 0953:16. The Vigilant MG is shown exiting the Syerston ATZ only as a primary contact, before crossing through the Europa's 12 o'clock at a range of 2.3nm before turning about onto a heading of 290°, as reported. Unfortunately at 0953:55, moments before the Airprox occurs, the Vigilant fades from coverage in the Europa pilot's 11 o'clock at a range of 0.8nm. Just after the Europa passes the projected point of conflict the Mode C indicates a slight descent to 2100ft (1013mb), which is maintained thereafter and perhaps indicative of the Europa pilot's avoiding action descent. Although not shown, the Airprox is presumed to have occurred at 0954:19, some 3nm ENE of Syerston, clear of the ATZ.

**HQ AIR (TRG)** comments that this was clearly a close Airprox as both parties concur on the separation. The mutual avoiding action appears to have been effective, although given the geometry, the Europa pilot's vertical manoeuvre is likely to have been more significant. The lessons regarding availability of a Traffic Service are valid and indicate that without additional resource, scope for improvement in use of surveillance services is limited.

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

Information available included reports from the pilots of both ac, radar video recordings and reports from the appropriate ATC and operating authorities.

Board Members echoed the Europa pilot's view over the provision of a TS to flights operating in Class G airspace. Whilst the pilot says that he had not asked for a TS because it was so often downgraded to a BS, Members agreed that it is wiser airmanship to obtain a radar service whenever possible. Clearly a BS will not generally deliver TI about any other ac in the vicinity and in this location other flights would be unlikely to be working Doncaster/Sheffield ATC. The Board recognised that it was not always feasible for controllers at terminal ATSUs to provide a radar service to transit traffic and priority will invariably be accorded to flights arriving or departing at that aerodrome. However, a nominated LARS unit should be able to provide a radar service within the normal constraints of traffic loading and radar/radio coverage. The Board agreed the Europa pilot could have chosen a more suitable ATSU as he progressed S along his route and here Waddington might be a more helpful choice perhaps with better coverage. Moreover, Members were keen to emphasise that past experience should not inhibit pilots from asking for a TS or DS in the first instance to supplement their own lookout whenever appropriate.

The Europa was not fitted with any form of collision warning system, but as the Vigilant was evidently not transponding Mode A and the type is not fitted with Mode C altitude reporting this would not have helped here. Nevertheless, controller Members emphasised the importance of SSR data, both in the provision of ATC services and to enable TCAS to detect other ac, so pilots should always ensure they are squawking when airborne in accordance with standard procedures. There were no other ac shown in the vicinity of the Europa's track clear to the E of Syerston and the primary contact that had been identified on the radar recording as the subject Vigilant faded just before the closest point, so the separation could not be assessed independently. With both pilot's reporting that they sighted each other's ac at a range of 200m during this crossing encounter, in the short time available this allowed little scope to assess the situation and take appropriate action. The difficulties of sighting white gliders of small cross-sectional area at the same level against a cloudscape was recognised, but applied equally to small aeroplanes such as the Europa. Members agreed unanimously that the Cause of this Airprox was a late sighting by both pilots.

With 50ft vertical separation, 50m apart both pilot's reports agreed on the minimum separation that was plainly too close for comfort. Although the Europa pilot perceived that he had 'right-of-way', the Board noted the Vigilant pilot was 'gliding' when the Airprox occurred and therefore he had right of way. Either way, at these close ranges the Europa pilot wisely elected to descend as the Vigilant pilot turned L. Fortunately, the avoiding action taken by both pilots was complimentary, but at these distances a test-pilot Member opined that in view of the Vigilant's relatively slow rate of roll, its pilot would likely have achieved greater separation in the vertical plane than was possible by turning. Since the Vigilant pilot's L turn probably had little effect on moving his ac out of the way, one experienced Member concluded that there was an actual Risk of collision. However, this was a solitary view; the Board concluded that whilst the resultant separation was barely sufficient, the action taken had been effective in augmenting what separation there was. Members agreed that the safety of the ac involved had been compromised.

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

Cause: Late sightings by both pilots.

Degree of Risk: B.