

AIRPROX REPORT No 2012085

Date/Time: 20 Jun 2012 0935Z

Position: 5141N 00215W (2nm SE
Nympsfield G/S - elev 700ft)

Airspace: LFIR (Class: G)

Reporting Ac Reported Ac

Type: PA25+Grob Astir EC135
Combination

Operator: Civ Club Civ Comm

Alt/FL: 1660ft↑ 1500ft
(QNH) (QNH)

Weather: VMC CLBC VMC CLBC

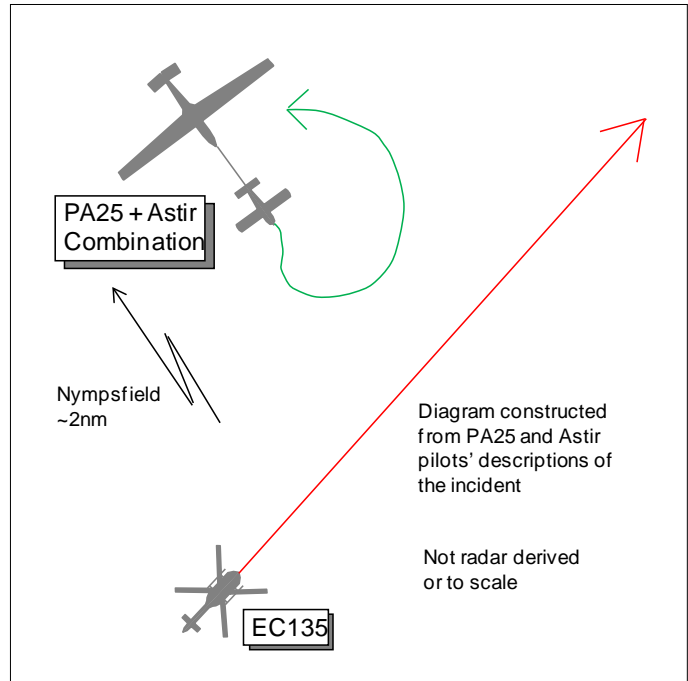
Visibility: 50km >10km

Reported Separation:

100m H Nil V/0-5nm H

Recorded Separation:

Returns merge (See ATSI report)



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE PA25 + GROB ASTIR COMBINATION PILOT reports carrying out an aerotow with a Grob Astir from Nympsfield and in communication with the launch point on 129.975MHz. The visibility was 50km clear below cloud in VMC and the ac was coloured orange with 2 strobe and landing lights switched on. About 2nm SE of Nympsfield, heading 120° climbing through 1660ft QNH at 65kt, she saw a yellow helicopter at a similar height approaching fast on an almost reciprocal track (320° she thought) about 800m away. She immediately executed a steep L turn through 270° but lost sight of the helicopter during the turn. Fortunately the instructor in the glider was the handling pilot and was able to stay on tow. She estimated the helicopter passed 100m away. If the glider had released it would have been in the path of the helicopter. She thought it unwise to waggle the ac's wings because the helicopter was approaching too fast and it is the emergency signal to the glider pilot to release. After this they were able to complete the tow and release as normal.

THE GROB ASTIR PILOT reports instructing a new pupil on the first flight of a 1-day course and he, the instructor, was PF. The PA25 had just started turning gently R before suddenly it turned hard L, using considerably more bank than is usual during an aerotow. His immediate reaction was that the PA25 had a technical problem and was returning to Nympsfield with great urgency. It was only a couple of seconds after the start of the turn that he saw a helicopter and realised what the problem was. He watched the helicopter fly below and R of them as they turned hard L and climbed. He did not see the helicopter change course. Although he had 5750hr gliding experience, of which 1600hr were instructing, he was interested that his initial reaction was completely wrong. He wondered what was wrong with the PA25 and did not immediately look around to see if the PA25 pilot was avoiding another ac. Clearly when on aerotow one attempts to keep a good lookout but inevitably, especially on a thermic day like the day of the incident, much of one's attention is on keeping station behind the tug ac in what is close formation flying in turbulent conditions. It is not possible to look away from the tug for more than a few seconds without getting out of position. Glider pilots are used to flying close to other ac and taking avoiding action from both gliders and powered ac. He believed that this was a very close encounter by any standards.

THE EC135 PILOT reports en-route to Wickenby, VFR and in receipt of a BS from Filton on 122.725MHz, squawking a discrete code with Modes S and C; TCAS 1 was fitted. The visibility was

>10km clear below cloud in VMC and the helicopter was coloured yellow with HISLs switched on. Cruising at 1500ft QNH at 120kt heading NE'ly about 2.5nm E of Nympsfield he saw a single piston ac towing a glider in his 10 o'clock at a similar level about 0.7nm away in a climbing L turn away from his track. He maintained his height and heading and the separation increased as the tug and glider continued the turn, estimating they passed 0.5nm at the CPA. He assessed the risk as low.

UKAB Note (1): The EC135 pilot was contacted owing to the disparate reported separation distances. He confirmed the tug/glider combination was in a turn when first seen, perhaps 500m at the closest, not as close as 100m. He did not feel he was in any way dangerously close or needing to take avoiding action.

ATSI reports that the Airprox was reported in the vicinity of Nympsfield gliding site (Class G airspace), between a PA25 and an EC135. The UK Aeronautical Information Publication promulgates Nympsfield as a glider launching site centered on 514251N 0021701W where aerotows may be encountered and winch launching takes place up to 3000ft agl during daylight hours, site elevation 700ft amsl.

The PA25 was operating VFR, towing a Grob 103 Astir glider, from Nympsfield gliding site and was in communication with Nympsfield launch point on frequency 129.975MHz. The EC135 was operating on a VFR flight from Bristol to Wickenby and was in receipt of a BS from Filton Radar on frequency 122.725MHz.

CAA ATSI had access to recordings of RT and radar from Filton together with written reports from both pilots. The timing of the Filton radar recordings was different to the time stamp on the RT and the area radar. Screenshots have been produced using the Filton radar but with the time adjusted to correlate with the RT and area radar recordings which are considered to be correct.

The Filton METARs were provided for 0920 and 0950 UTC: EGTG 200920Z 15004KT 9999 FEW030 19/10 Q1017= and EGTG 200950Z 15006KT 9999 FEW030 19/09 Q1017=

At 0925:00 the EC135 flight contacted Filton Radar and a BS was agreed.

At 0933:27 the EC135 was approximately 4nm to the S of Nympsfield, tracking NE, at altitude 1700ft, while a faint primary return was showing in the vicinity of the Nympsfield gliding site. The primary return remained visible as the EC135 continued to track NE (Figure 1). By 0935:05 the EC135 was approximately 2nm SE of Nympsfield with the primary return in its 10 o'clock position at a range of approximately 0.5nm (Figure 2). At 0935:18 the primary return and the EC135 appeared to merge (Figure 3) before the primary return separated and tracked to the W at 0935:35 (Figure 4).

Figure 1



Figure 2



Figure 3



Figure 4



Filton ATSU advised that they do not receive notification when Nympsfield is active; however, they do pass TI that the site is active when radar derived information suggests that is the case.

The written report from the pilot of the PA25 stated that she saw the helicopter at a similar height approaching fast on an almost reciprocal track so she immediately executed a steep L turn.

The written report from the pilot of the EC135 stated that he saw the PA25 and the glider as they were in a climbing L turn away from him. The pilot of the EC135 stated that he maintained height and heading and separation increased from the tug and glider.

At 0936:10 the pilot of the EC135 informed Filton Radar that he was changing to Gloucester.

At 0938:00 the Filton Radar controller advised other traffic on the frequency that both Nympsfield and Aston Down gliding sites appeared to be active.

Both flights were operating VFR in Class G airspace therefore both pilots were ultimately responsible for collision avoidance.

The EC135 was in receipt of a BS from Filton Radar. Under a BS there is no requirement for the controller to monitor the flight.

The Filton Radar controller advised other traffic on frequency that Nympsfield was active after the reported Airprox occurred. It is likely that the controller was not aware of activity taking place at Nympsfield until after the reported Airprox occurred.

The Airprox occurred at 0933:58 UTC, in the vicinity of Nympsfield gliding site when the EC135 and PA25 came into proximity to the extent that the pilot of the PA25 was concerned about the position of the EC135.

As both flights were in Class G airspace, VFR, the pilots of both ac were ultimately responsible for collision avoidance.

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 and reports from the appropriate ATC authorities.

As the incident occurred in Class G airspace, pilots were responsible for maintaining their own separation from other ac through see and avoid. A pilot Member commented that the routing options for the EC135 pilot to remain clear of aeronautical hazards were limited in the area; the helicopter tracked between Nympsfield to the W and R105 as well as Aston Down to the E. There was no doubt that both the PA25 and EC135 pilots were reporting the same incident but Members could not resolve the disparate separation distances reported by all parties. The PA25 pilot reported 100m, the Grob Astir pilot reported 'very close' whereas the EC135 pilot reported 0.5nm at the CPA. The PA25 pilot had seen the EC135 at about 800m, a late sighting, and had executed a steep L turn to avoid, an usual manoeuvre whilst carrying out an aerotow. The Astir pilot, after initially thinking the PA25 had a problem, had quickly seen the EC135 and remained on tow and followed the PA25's L turn to the W whilst watching the EC135 pass to his R and below. A pilot Member informed the Board that the PA25 pilot had done well as the ac had restricted visibility ahead, owing to the ac's long nose, and that there was a need to weave in the climb to clear the airspace ahead. The EC135 flight was under a BS from Filton so there was no requirement for the controller to monitor its progress and the controller only became aware that Nympsfield was active after the Airprox. The EC135 pilot reported seeing the combination in his 10 o'clock range 0.7nm already in a climbing L turn away from his track; Members concluded that this was after the tug-glider combination's avoiding action turn and effectively a non-sighting.

Turning to risk, with the difference in perceived separation Members were torn between levels of risk for this encounter. Taking the EC135 pilot's estimated distances and combining those with the actions taken by the PA25 pilot it was possible for the Board to assess the risk as C, no risk of collision. However, after considering the radar data, the late sightings and distances reported by both the PA25 and Grob Astir pilots and the fact that the ac passed with the EC135 temporarily unsighted to the PA25 pilot whilst belly-up in the turn, the Board were persuaded that safety had not been assured during the encounter.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: Effectively a non-sighting by the EC135 pilot and late sightings by the PA25/Grob Astir combination pilots.

Degree of Risk: B.