## AIRPROX REPORT No 2012095



## PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

**THE PIPER PA25 PAWNEE TUG PILOT (PA25)** reports he was airborne from Challock Glider Launching Site conducting an aerotow to 1500ft [about 2100ft amsl] in VMC and about 2nm S of Charing Village when the pilot of the ASK21 glider saw a white and red PA28 converging on the tug/glider combination from their L. His tug/glider combination was on a W'ly heading, climbing through 1400ft Challock QFE [about 2000ft amsl] at 70kt; the PA28 was on a NE heading flying level. The glider pilot, considered there to be a real risk of collision between the PA28 and the tug and/or glider, so released the tow at 1400ft QFE. Immediately he - the tug pilot - initiated a descending R turn, which is the post-release SOP, at which point he saw the PA28 pass over his aeroplane with an estimated vertical separation of less than 100ft and about 100m horizontal separation. He had not seen the PA28 earlier as it was in the blind spot of his Pawnee's windshield/door frame and assessed the Risk as 'high'.

He opined that GA ac regularly fly either over Challock below a height of 2000ft or very close to its boundary. His PA25 is coloured white/green; the HISL was on. SSR is not fitted.

**THE ASK21 GLIDER PILOT** reports he was being towed by the PA25, heading W at 70kt, near the top of the launch (normally 1500ft (QFE) about 300-400ft below cloud, when he became aware of a low-wing ac in his 10-11 o'clock on a converging course with the tug/glider combination about 100ft above them. He considered that if the aerotow was continued there was a serious risk of a collision either with the PA25, glider, or both. Consequently, to avoid the PA28 he released the tow at 1400ft (QFE), turned L (normal procedure) and descended as the PA25 tug immediately turned R in a descending turn. He would normally have executed a climbing turn to the L, but considered that a climb might put him in conflict with the other ac if it took avoiding action by turning R. He assessed the Risk as 'high'. RT is not fitted to the glider, which is coloured white with a red nose.

**THE PIPER PA28 PILOT** reports he had departed from Headcorn bound for Manston, VFR, accompanied by another qualified pilot in the RH seat. His aeroplane is coloured white with red trim and the HISL was on. He was flying in VMC with no cloud in CAVOK conditions.

Upon departure, once clear of the Headcorn Parachute Dropping Zone, he changed frequency to Manston APPROACH on 132.450MHz and levelled at 2200ft (1010hPa), heading 064° at 90kt. He contacted Manston, reported his altitude as 2200ft [Manston QNH (1010hPa)] and requested a BS

that was provided. A squawk was allocated and selected with Mode C. As there was no request to recycle the transponder he assumed Mode C was operational and all was well. [No Mode C was apparent throughout the period of the Airprox.] He landed at Manston after joining R base for RW10. He cannot describe the Airprox as he was unaware it had taken place - the tug/glider combination was not seen.

He has a PPL and has just recently given up an IMC and night rating with about 500hr experience. He uses a popular tablet computer and in-flight GPS navigation tool together with his normal chart. His colleague uses a GPS unit and normal chart. Neither of them saw the tug ac or glider and there was apparently no radio communication by the other pilot with Headcorn or Manston. If an Airprox had occurred the PA28 pilot would have expected an immediate RT call to have been made to the appropriate ATC unit. Under the circumstances, he is unaware of how he should have known about the proximity of the other ac. Since there is no A/G Station at Challock and the strip lies in a SW/NE direction he flew fairly close to their zone (sic) as he tends to treat these airstrips as a SVFR in order to maintain maximum O/H space between their take-off and landing traffic. Because of the prevailing wind condition from the E, he expected all glider tug ac to be well to the N and E of Challock. However, the tug and glider pilots' reports indicate they were almost directly in the climb out path from Headcorn for eastbound traffic and very close to the Parachute dropping zone, but nevertheless the PA28 pilots did not see the tug/glider combination. He would very much like to cooperate in this matter to find out how this situation arose and more importantly, how it could have been avoided. He cannot add anything further, except to say that his colleague thought it was an uneventful and comfortable flight. That an incident resulted when under Manston's radar surveillance frankly astounds them and gives them grave cause for concern. The PA28 pilot enclosed a map of his planned route, which he followed rigorously and a photo of his ac.

UKAB Note (1): The UK AIP at ENR 5.5 promulgates Challock glider launching site as active from Sunrise to Sunset, where aerotows and winching launching to 2000ft above the site elevation of 600ft amsl take place.

**ATSI** reports that the PA28 pilot was routeing VFR from Headcorn to Manston and was establishing communications with Manston APPROACH on 132.450MHz as he passed abeam Challock glider launching site. At 1116:00 UTC the LAC Radar recordings show the PA28 displaying the general conspicuity squawk of A7000 departing the vicinity of Headcorn aerodrome with no associated Mode C level information.

At 1117:32 the PA28 is 2nm SW of Challock glider launching site where VFR charts show the maximum altitude of the winch launch as 2600ft amsl. Between 1118 and 1119 as the PA28 continued towards Challock there are spurious primary returns to the N of the PA28; however, these are too random in nature to provide conclusive evidence of the presence of another ac.

The PA28 pilot called Manston APPROACH at 1118:20, an SSR code of A4257 was assigned, the pilot's message passed and a BS agreed. The Manston QNH was confirmed as 1010hPa. The PA28 pilot was requested to report next when Manston aerodrome was in sight. At 1118:52, the PA28's Mode A code changed from A7000 to 4257. The PA28 was 21.3nm SSW of Manston and 0.3nm S of the plotted position notified for Challock.

[UKAB Note (2): The PA28 passed about 0.3nm abeam Challock at 1119:00.]

The PA28 pilot was requested to report his level at 1119:20 and this was given as 2200ft Manston QNH (1010hPa), when the PA28 was 0.6nm ENE of Challock. As the PA28 flew away from Challock to the NE no other radar returns were observed in the PA28's vicinity.

All three ac were operating in uncontrolled Class G airspace where the responsibility for the avoidance of other ac rests ultimately with the pilots. At no time during review of the recorded area radar was a Mode C level displayed against the PA28. Therefore the ac's altitude could not be verified. ATSI was unable to identify the reporting PA25 or ASK21 from the available surveillance recording; therefore, the reported distance between the ac involved cannot be verified.

When the PA28 was in the vicinity of Challock the pilot reported the ac's altitude as 2200ft. As the notified maximum altitude for winch launching at Challock is 2600ft amsl, the PA28 flew through airspace within which it could reasonably be expected that gliders might be launching, together with aerotow ac.

Under a BS there is no requirement for the controller to monitor the flight and, given that the PA28 pilot was requested to report Manston A/D in sight, perhaps as an aide memoir to the controller, no increased vigilance would likely be given to the PA28 after details had been exchanged.

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

Information available included reports from the pilots of both ac, a transcript of the relevant RT Manston frequency, radar video recordings and a report from the appropriate ATC authority.

It was plain to the Board that the only pilot who had identified the developing confliction and was able to take avoiding action was the ASK21 glider pilot, who saw the PA28 in his 10-11 o'clock on a converging course about 100ft above the combination and elected to release the tow. Members concluded that this was a late sighting by the ASK21 pilot and part of the Cause. It was unfortunate, however, that the ASK21 was not fitted with RT, which prevented the pilot from warning the PA25 pilot. As it was, the tug pilot perceived that the glider pilot's cable release to be entirely normal at the top of climb, until he spotted the PA28 overflying his ac, less than 100ft above his aeroplane about 100m away. A glider pilot Member explained that the long nose of the PA25 can be detrimental to forward lookout and it is necessary to weave the ac to view the planned course ahead; nevertheless, the Board agreed that this was effectively, a non-sighting by the PA25 pilot and the second part of the Cause. However, the PA25 pilot as the PIC of the tug/glider combination could reasonably have expected other pilots operating VFR in Class G airspace to give way to his tug towing the glider in accordance with the Rules of the Air. However, 'the Rules' can only work if ac are seen in good time, which relies on an effective lookout scan routine so that pilots can fulfil their responsibilities to 'see and avoid' other ac. The PA28 pilot reports that neither he nor his colleague saw the PA25 towing the ASK21 and remained unaware of the proximity of the tug/glider combination throughout, leading Members to agree that this non-sighting by the PA28 pilot was the final part of the Cause. The Board concluded, therefore, that this Airprox was the result of a non-sighting by the PA28 pilot, effectively a non-sighting by the PA25 pilot and a late sighting by the ASK21 pilot.

Although the Airprox was not illustrated on the radar recording, with neither the PA25 nor the ASK21 glider shown at all, the PA28's track to Manston was clearly evident. After departing from Headcorn, the PA28 is shown tracking NE'ly through the vicinity of the reported Airprox location just before 1118:08. This was shortly before the PA28 pilot called Manston APPROACH for the first time at 1118:20, after which the SSR code of A4257 was assigned and displayed, albeit without Mode C so the PA28's altitude could not be confirmed independently. Members postulated that the PA28 pilot could have been dialling up the Manston frequency as the conflict developed, become distracted by the RT exchange and then subsequently heads-in selecting the assigned SSR code. Hence, over the period of the Airprox, the PA28 pilot's attention could feasibly have been diverted away from his lookout - a salutary lesson to keep at least one set of eyes looking out of the cockpit maintaining an effective scan for other ac. Plainly the PA25 pilot would have no idea that the PA28 was inbound to Manston and would not be in communication with Manston ATC whilst conducting aerotows at Challock. Consequently, the chances of a call from the PA25 on the frequency advising of the Airprox were negligible. Moreover, controller Members were keen to point out that under the BS agreed with Manston APPROACH, irrespective of whether a radar was available to the controller or not, no radar service was implied at all by the issue of a squawk and the pilot remained solely responsible for collision avoidance. Whilst under a BS a controller might offer a warning if he has good reason to believe another ac might be in close proximity; here the APPROACH controller had no knowledge of the tug/glider combination whatsoever.

The radar recording shows that the PA28 passed about 0.3nm abeam Challock at 1119:00. Given the aids to pilot navigation utilised by the PA28 pilot and his pilot colleague, Members were surprised that neither of them had identified that they were passing so close to a promulgated and active glider launching site at a reported altitude of 2200ft Manston QNH (1010hPa) and thus below the notified maximum altitude where winch cables may be encountered up to 2600ft amsl. The associated dangers from the winch cable were self-evident! However, the Board's assessment here was confined to the Risk of collision with the tug and ASK21 glider combination. Whilst the ASK21 pilot did not become aware of the PA28 until a late stage, he was nonetheless able to take effective action to release the tow and turn L. Members concluded that the glider pilot's ability to manoeuvre out of the way was limited and safety had indeed been compromised. However, none of the pilots of the powered ac were aware of the proximity of the other ac before the PA28 overflew the PA25 about 100ft above it. Chance had played a hand here, leading the Board to conclude that an actual Risk of collision had existed in the circumstances conscientiously reported here.

## PART C: ASSESSMENT OF CAUSE AND RISK

A.

<u>Cause</u>: A non-sighting by the PA28 pilot, effectively a non-sighting by the PA25 pilot and a late sighting by the ASK21 pilot.

Degree of Risk: