

## AIRPROX REPORT No 2011028

Date/Time: 7 Apr 2011 1409Z

Position: 5116N 00105W  
(5nm W Odiham - elev  
405ft)

Airspace: Odiham MATZ (Class: G)

Type: Chinook Untraced Glider

Operator: HQ JHC N/K

Alt/FL: 1600ft NK  
(QFE 1013mb)

Weather: VMC CAVOK NK

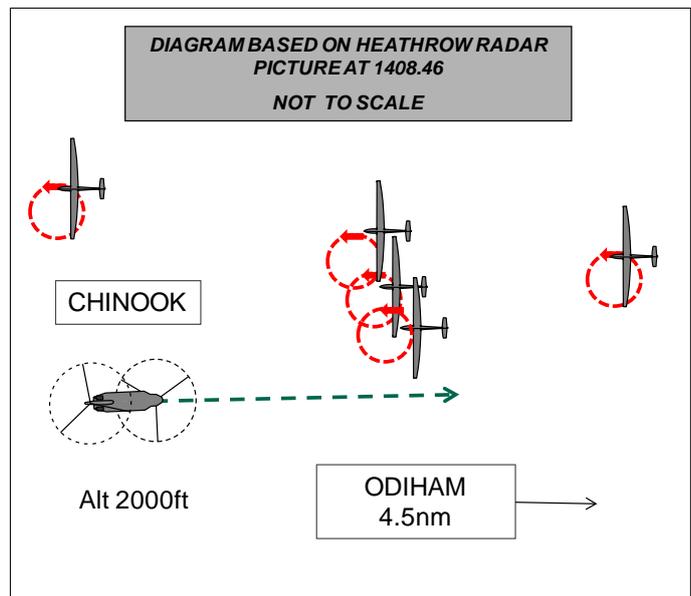
Visibility: 20km NK

Reported Separation:

0ft V/150m H NK

Recorded Separation:

NR



## PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

**THE CHINOOK PILOT** reports flying a green helicopter on an SRA recovery to Odiham under a TS, in good weather conditions, squawking as directed with Mode C and S with no CWS fitted. While under radar vectoring heading 085°, out of sun, at 120kt, just prior to descent ATC called traffic in their 11 o'clock with no height and then cleared them to descend on the glideslope. On looking in the 11 o'clock the traffic was identified an estimated 300m away, and although it was much closer than acceptable, it was not an actual collision risk. The LH seat pilot then saw another object in their 9 o'clock, slightly higher than them and about 150m away, which transpired to be a white glider banking to the R away from their ac. This was perceived to pose a high collision risk as they had descended through the alt of the glider and he reported the incident to ATC on the frequency in use.

The glider was seen late and only after the call about the other ac from ATC; they were in a period of high workload with the HP 'heads in' on instruments while the NHP had just completed pre-landing checks and set up the approach aid (GPS) requiring further time 'heads in'.

UKAB Note (1): Despite extensive procedural tracing action the glider pilot could not initially be identified. However after a further approach the following e-mail was received:

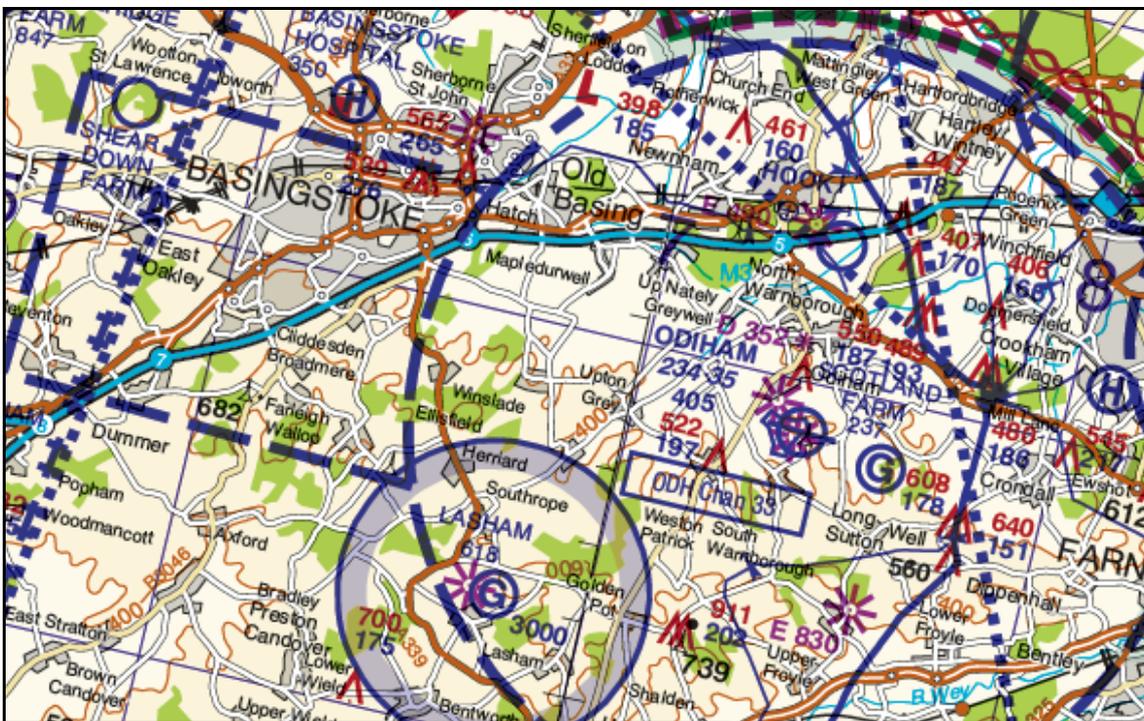
'On Thursday the 7<sup>th</sup> of April I took a launch from Lasham airfield in my LS8 glider (reg given) with the intention of flying a task to the North. The weather didn't turn out as predicted and I was finding it difficult to stay airborne locally to Lasham so I abandoned the original task and decided to stay local to the airfield. The visibility on this day varied from 5n to 6km looking into sun and 10km looking down sun. About an hour into the flight when I was just south of Basingstoke and slowly climbing in a thermal I spotted a Chinook helicopter about 2 to 3 miles away approaching my location from the west. After another two turns I became obvious that he had not seen me so I straightened up and headed North. I would estimate the separation between us was 500 to 600ft. If I had carried on circling my estimation was that he would have passed 200ft below me. I was fully aware of his position at all times and I chose to move away because I suspected that he was flying a simulated instrument approach and there would only be one set of eyes looking out'.

The pilot did not say if there were any other gliders in the area as shown on the radar, nor if he was the closest glider to the Chinook. Further 'just S of Basingstoke', his reported position is about 6nm on the C/L for RW09 and about 1½ nm W of the reported incident position; it is therefore thought unlikely that he was the reported glider.

**The TD Controller** reported that he was training a UT controller on SRA when the Chinook was handed over from APP. Communication was established at 7.5nm final, about half a mile south of the CL. Conflicting traffic was seen at a range of 5 and a half miles final and half a mile N of the CL. The Chinook was converging with the CL while the glider continued to manoeuvre in the Chinook's 11 o'clock at about 2nm. Following the initial handover of the Chinook he instructed the UT controller to call the glider to the Chinook; the pilot acknowledged the traffic and continued as instructed. A few moments later, the pilot stated his intention to file an Airprox against the glider, later explaining that he thought the glider pilot was operating in an inappropriate area and displaying poor airmanship to the detriment of flight safety.

**HQ 1GP BM SM** reports that this Airprox occurred 4.5nm W of Odiham between a Chinook conducting an SRA in receipt of a TS from Odiham TD and an untraced glider.

Lasham airfield is a notified glider site approximately 4.5nm SW of Odiham, which has a mandatory military avoidance of 2nm radius up to 3000ft agl. The UK Mil LFHB contains a further warning that "intensive gliding activity takes place within 5nm of Lasham." The diagram below shows the local area.



The Chinook free-called Odiham APP at 1402:08 while 8nm WSW of Odiham, was identified and was placed on TS, reduced by APP, stating, "reduced traffic information, you are entering an area of high traffic density with Lasham gliders."

Although the Chinook requested a PAR for RW09, this was not available as the PAR was on maintenance; an SRA was offered and accepted.

At 1407:24 APP transferred control of the Chinook to Talkdown (TD), with comms being established at 1407:35 when the Chinook was 7nm out. TD was manned by a trainee and an experienced instructor. From 1407:35 until 1408:08 there was an almost continuous RT exchange between TD and the Chinook.

At 1408:16, TD passed TI to the Chinook stating, “*traffic north-east, 1 mile, manoeuvring, no height information, possibly gliders*” and almost immediately, the pilot responded that they were visual with the traffic. At that point on the radar replay one primary-only contact can be seen 1nm NE of the Chinook, with 2 further intermittent primary contacts 1.5nm to the NE.

The radar replay shows that the CPA probably occurs at about 1408:37. At 1408:39, the next sweep of the radar after the CPA, there are 4 primary-only contacts almost directly N of the Chinook, the closest of which is just to the NW. Although the minimum separation cannot be measured, it is likely to accord with the Chinook pilot’s report. Based upon the Chinook pilot’s sighting report and their position on radar, the gliders were on, or just N of, the extended CL at about the same height as the Chinook within the instrument pattern.

The TD instructor reported that he instructed the U/T controller to call the glider to the Chinook; it is assumed that this prompt occurred between 1408:08 and the passing of TI at 1408:16. Given the RT exchange between TD and the Chinook in the 43sec after the initial call, 1408:08 would have been the first opportunity to pass TI. Moreover, the TD instructor correctly assessed that there was sufficient time to prompt TD to pass TI, before the delay became unacceptable. It is considered that that TI was passed by TD in a timely manner and enabled the crew to visually acquire at least one of the gliders operating in that area, 14sec before the CPA.

The operation of the gliders in such a constrained piece of airspace causes both technical and human problems. The lack of SSR in gliders and the ac construction makes them almost invisible to surveillance radars and it is impossible to identify the number of gliders operating in the area, thereby making it impossible for ATC to pass anything more informative than generic TI. Furthermore, there is a risk for the aircrew that, given the difficulty in visually acquiring gliders, once they have sighted one glider, the human eye will focus on that for a short period and exclude other objects, thereby reducing the time available to visually acquire any other targets.

Notwithstanding that the gliders were operating within Class G airspace, their position close to the RW approach path of a busy airfield at about the same alt as the glidepath is not considered good airmanship.

This Airprox involved a late sighting of the gliders by the Chinook crew at a time of high cockpit workload. A contributory factor was that the gliders chose to operate, inside the MATZ, close to the Odiham instrument pattern.

BM SM Spt recommends that Odiham continue to engage with the local flying community to develop awareness of their operations.

UKAB NOTE (2): The recording of the Heathrow radar shows the Chinook throughout as described by in the HQ 1 GP BM SM report. There are multiple primary only intermittent contacts, presumed to be gliders, manoeuvring just to the N of the Odiham RW09 C/L.

**HQ JHC** comments that the comments by HQ 1 GP BM SM are fully supported. The poor airmanship displayed by the glider pilots who chose to operate on the extended centreline of a busy airfield at around the same altitude as the glide path, undoubtedly made an Airprox much more likely to happen. The lack of SSR in gliders has been highlighted, alongside the glider’s construction, as making them difficult to see on surveillance radars and by the human eye (especially when scanning for several ac at once).

HQ JHC considers that a mid-air collision with a glider or light coloured small ac is a very significant risk. This Airprox indicates that the local gliding community is probably not fully cognisant of the flying operations at RAF Odiham and/or that the risk acceptance differs between the gliding community and other aviators.

It further supports the requests in HQ JHC comments on Airprox 2011023 - that the UK Airprox Board recommends the fitting of transponders to all gliders and similarly, light coloured small ac in order to reduce the frequency of Airproxs and the likelihood of an actual collision between a military RW ac and a glider, and that the UK Airprox Board undertakes to educate the gliding community on the risk of mid air collision in the vicinity of military aerodromes.

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

Information available included reports from the Chinook pilot, transcripts of the relevant RT frequencies, radar photographs/video recordings, reports from the air traffic controllers involved and reports from the appropriate ATC and operating authorities.

Members agreed that soaring close to the instrument approach path to the active RW of a busy military airfield is, at best, ill-advised.

The gliding Member was surprised that there was not a closer liaison between Odiham and Lasham and better communication between Odiham ATC and Lasham. There were several plausible suggestions one of which was that Lasham gliders operating inside the MATZ or close to the instrument pattern, should listen out on a nominated (VHF) frequency on which Odiham ATC could broadcast the presence of instrument traffic as soon as they become aware of an ac inbound; this would allow gliders temporarily to remain clear of the area. The HQ 1 GP BM SM Advisor stated that there was liaison between Odiham and Lasham, but others suggested that this might not be at the level required to agree integration procedures.

Several civilian Members expressed surprise that a military ac on a SRA (or GCA) should operate in receipt of a TS as they considered that pilots on instrument approaches should be in receipt of a higher level of service; they acknowledged, however, that military instrument approaches are usually flown in Class G rather than Class D airspace, which is generally the case at civilian airfields with similar traffic densities. In any case, this incident where there were gliders soaring close to the RW C/L provides a good example of why a DS can be inappropriate as the ac would be vectored round the 'unknowns' and never achieve the aim of conducting a radar approach; that being the case, a TS was the only feasible option.

The HQ JHC recommendation regarding compulsory fitment of transponders was not supported by the Board; the reasoning was discussed previously on Airprox 2011023 and is outlined in that report.

The reluctance of glider pilots to submit reports was again a factor in assessing this Airprox. The Board was grateful for the glider pilot's report at UKAB Note (1), but agreed that, since this pilot was slightly further out from Odiham, it was likely that he was not the one who came closest to the Chinook. Members did not believe that the reported pilot could have come so close to a Chinook without becoming aware of it at some stage. However, in the absence of a report from the glider pilot, it was impossible to determine whether and/or when he saw the Chinook and whether and/or when he took avoiding action. Therefore the Board reluctantly concluded that the incident had been a conflict on the Odiham approach. In assessing the risk, the Board noted that the Chinook crew saw that the glider was 150m distant and turning away from them and therefore agreed that on balance, there had likely been no risk of collision.

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

Cause: A conflict on the instrument approach to Odiham.

Degree of Risk: C.