

AIRPROX REPORT No 2011115

Date/Time: 3 Sep 2011 1407Z (Saturday)

Position: 5412N 00123W
(Topcliffe ATZ - elev 92ft)

Airspace: ATZ (Class: G)

Reporting Ac Reported Ac

Type: Vigilant Bell 206

Operator: HQ Air (Trg) Civ Pte

Alt/FL: 1300ft 1200ft
QFE (1001mb) QNH

Weather: VMC VMC (into Sun)

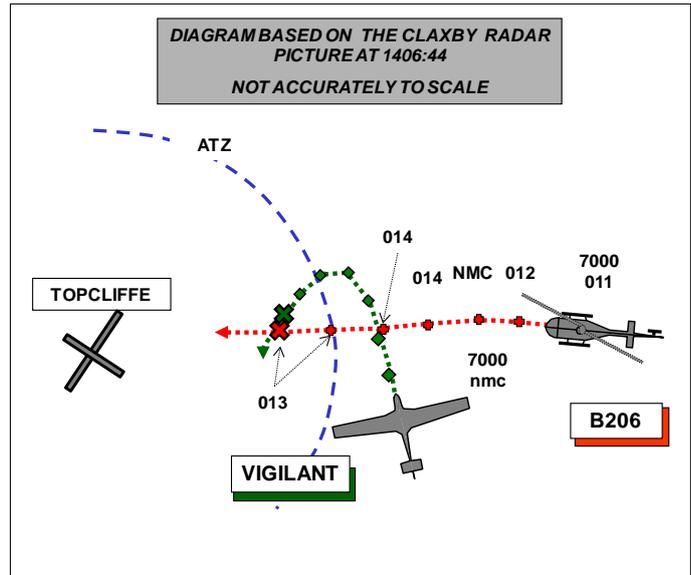
Visibility: 20km 35km

Reported Separation:

200ft V/200m H 300ft V/1nm H

Recorded Separation:

NR V/0.1nm H



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE VIGILANT DUTY INSTRUCTOR (DI) reports that he was supervising flying operations for the day. A helicopter had called Topcliffe Radio previously when flying into Bagby airfield [3nm E of Topcliffe, inside the MATZ] and he had informed the pilot that, although Topcliffe APP was closed and no service was available, the ATZ was active with 6 military motor gliders and he avoided the ATZ.

Later that day the pilot called again and informed of the same; the pilot replied that he would be transiting to the NE of the airfield at 1500ft.

Meanwhile a red and white Vigilant motor glider was heading 290° at 60kt and descending to 1200ft QFE to rejoin the cct, in contact with Topcliffe radio and squawking but Modes C&S were not fitted; it had the engine turned off on a Gliding Induction flight. The helicopter (reg provided) crossed over the airfield from SE to NW about 200ft below and 200m behind the Vigilant, quickly overtaking it before heading away from the airfield still on SW'ly track. Another Vigilant pilot called the helicopter pilot asking if he had seen the engine off ac and he replied that he was visual with it. From his position in the RW caravan, although the distance between the two ac appeared very close, he (the DI) assessed the risk of collision as being low.

No avoiding action was possible by the Vigilant pilot as she would not have seen the helicopter.

THE BELL 206 PILOT reports flying a silver ac on a private VFR flight with all external lights on, from Bagby to a private strip. He was squawking 7000 with Mode C and was in receipt of a BS [he thought] from Topcliffe. He departed from Bagby heading 270° at 100kt and immediately after getting airborne changed from Bagby on 123.25 and called Topcliffe [gliding] on 125.00 asking for traffic and which RW was in use as he climbed to 1200ft; they replied the RW was 20, they were active but would close at 1200 [he thought], he should keep a good lookout and thanked him for call (as they nearly always say). He opined that Bagby and Topcliffe should use the same frequency.

He saw a red and white motor glider at 1500ft, passed 300ft below it and 1nm away and took no avoidance as none was required; he kept the ac in sight and assessed the risk of collision as being none.

UKAB Note (1): Topcliffe is a government airfield with an ATZ which is a circle of 2nm rad centred on 5412.19N 00122.55W up to 2000ft aal (92ft). It is also promulgated in the UKAIP as a glider launch site (HJ) winch/ground tow and tug aircraft/motor glider with no vertical limit published.

UKAB Note (2): Topcliffe A/G frequency is not recorded.

UKAB Note (3): The recording of the Claxby radar shows the incident as shown above. Although both contacts are 7000 squawks there is little doubt that they are the ac involved. Since the Vigilant did not have Mode C and was descending it is not possible to determine the vertical separation. The B206 popped up at 1405.35 about 2nm E of Topcliffe tracking 270° with the Vigilant 1.6nm away in his 11 o'clock. Thereafter the ac close as shown above.

HQ AIR (TRG) comments that the Vigilant pilot was unfortunate in that the B206 approached on each occasion from the opposite side to where her attention would have been focussed i.e. the airfield. It might be reasonable to expect the ATZ to be clear of intruder aircraft but experience shows that this is not a safe assumption and that a sound all-round lookout scan must be maintained at all times. From his report, it does not appear that the B206 pilot was visual with the Vigilant in question, which raises concerns over the integration procedures between Topcliffe and Bagby.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from (or on behalf of) the pilots of both ac, radar recordings and a report from the Vigilant operating authority.

The Board accepted that the B206 pilot had made conscientious efforts to contact the gliding school prior to transiting through their operating area. However, Members struggled to reconcile the B206 pilot's estimate of the horizontal separation between his ac and the glider with the evidence from the radar recording. It is not uncommon for pilots transiting close to glider launching sites to see one or more gliders but pass close to another glider that they have not seen. In this case however, the glider's left turn through approximately 150 degrees offered an alternative explanation. Although it was clear to Members that the B206 pilot had initially seen the glider some distance away, they debated whether he saw it when the ac tracks crossed the second time; a majority thought it unlikely that he had as they thought that he would not have estimated the separation as being 1nm when the radar showed it to be only 0.1nm at the CPA. When the Vigilant crossed ahead of the B206 the first time while the latter was heading W climbing out from Bagby, the helicopter pilot's estimate of 1nm would have been fairly accurate. It seemed possible, therefore, that the B206 pilot had initially seen the Vigilant crossing from left to right about 1nm away, then discounted it as a factor and lost sight of it, possibly as it turned tail-on against a background of cloud. For her part, on her northerly heading the Vigilant pilot might have been able to see the helicopter low on her right hand side, but her focus of attention would have been towards the airfield. Once she started her left turn it would have been almost impossible to see the helicopter behind and below until a very late stage. Although both pilots had a responsibility to see and avoid each other, the B206 pilot was required to give way to the glider on his right hand side. The Board concluded, therefore, that the Cause was that the B206 pilot had flown into conflict with the Vigilant, which he may not have seen at its closest point.

Turning their attention to the Risk, a majority of Members accepted that while the B206 pilot had seen the subject glider earlier in the encounter, he did not see it as it passed almost directly above him at the CPA. Furthermore, since the Vigilant pilot's report was submitted by the DI who was located some distance away, Members could not determine whether the HP had seen the B206 as it came from behind and passed almost directly below her; further again, since the DI was not close to the CPA, his estimation of the separation might have been flawed. However, it was accepted that this was not wholly the case as his estimate of the horizontal separation was radar verified and

vertical estimations by experienced observers can be fairly accurate even from some distance. Members therefore agreed that the vertical separation had been about 2-300ft. Since apparently neither pilot had seen or, if necessary, avoided the other ac, a small majority of Members agreed that normal safety standards had probably been eroded.

The purpose of an ATZ is to afford a degree of protection to (powered) aircraft operating therein. They are not established to protect glider (or motorglider) operations; these activities being promulgated in the UKAIP as 'Glider Launch Sites' at ENR 5-5-1-1 et seq and are not afforded any mandatory avoidance or special procedures and they have no promulgated dimensions. Members noted that Topcliffe has an ATZ that is published in the UKAIP [ENR 2-2-2-5] as being open H24; that being the case and that Topcliffe has an ATC unit (albeit closed at the time) the ANO, RoA Rule 45 (3), requires that pilots 'obtain the permission of the ATC unit' to enter (the ATZ) and enable flight to be conducted safely within that ATZ. Since Glider Control reportedly used the callsign 'Topcliffe Radio', implying that an A/G service was being provided, Members considered that the B206 pilot was justified in assuming that he could proceed under RoA 45 (5) which requires only that pilots get information to enable flight to be conducted safely within the ATZ rather than 'permission' to enter. However, in reality Topcliffe Radio is not an A/G service and there is no facility provided for ac to enter Topcliffe ATZ when ATC is closed.

Although the B206 pilot entered the ATZ without permission, Members agreed that this was not a significant factor in this incident, except perhaps that the Gliding Supervisor might have thought that ATZ was established to protect gliders operating therein.

The UKAB Secretariat subsequently contacted HQ Air Cadets to ascertain the situation regarding VGS usage of the callsign 'Radio' implying that the operator is qualified as an Air/Ground Operator rather than a Gliding Supervisor. If this is the case, then locations that provide formal AG services should be promulgated in the AIP 2-2-2-5 – Frequency Purpose A/G.

Post Meeting Note: The MoD is reviewing the operational hours of the Topcliffe ATZ (and MATZ).

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: The Bell 206 JetRanger pilot entered the ATZ and flew into conflict with the Vigilant, which he might not have seen at its closest point.

Degree of Risk: B.