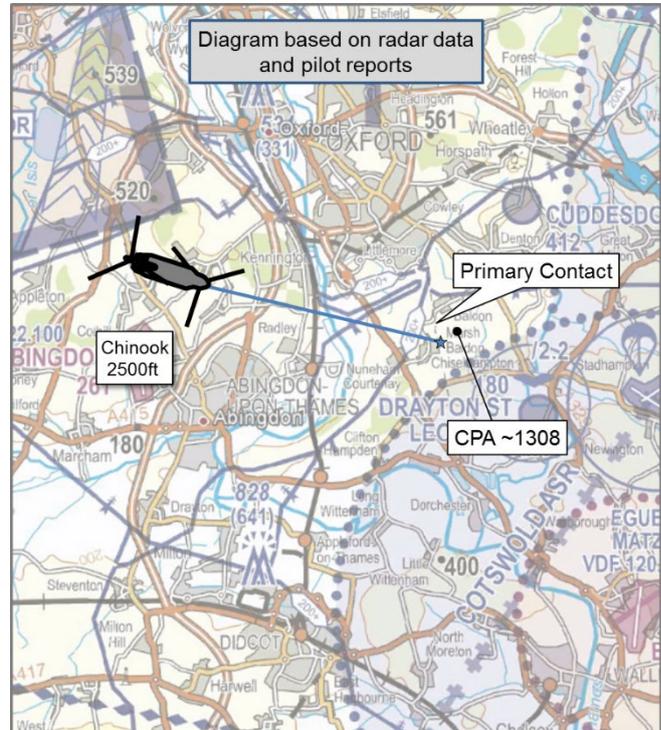


AIRPROX REPORT No 2018058

Date: 23 Apr 2018 Time: 1308Z Position: 5141N 00110W Location: 5nm NW Benson

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

| Recorded | Aircraft 1 | Aircraft 2 |
|-------------------|---------------|----------------|
| Aircraft | Chinook | ASG 29 |
| Operator | HQ JHC | Civ GLD |
| Airspace | London FIR | London FIR |
| Class | G | G |
| Rules | IFR | VFR |
| Service | Traffic | None |
| Provider | Benson App | |
| Altitude/FL | | |
| Transponder | A, C, S | Not fitted. |
| Reported | | |
| Colours | Green | White |
| Lighting | NK | NK |
| Conditions | VMC | VMC |
| Visibility | >10km | >10km |
| Altitude/FL | 2500ft | 3100ft |
| Altimeter | QFE (1009hPa) | QNH (1018hPa) |
| Heading | 023° | 225° |
| Speed | 120kt | 70kt |
| ACAS/TAS | TAS | FLARM |
| Alert | None | N/A |
| Separation | | |
| Reported | 100ft V/0m H | 200ft V/300m H |
| Recorded | NK | |



THE CHINOOK PILOT reports that he was conducting Instrument Flying training with a trainee pilot as the handling pilot. They were VMC and the Captain and a second trainee pilot in the jump seat were both looking out, as were the 3 crewman in the back. ATC had given Traffic Information on two contacts 1-2nm away with no height information, there was nothing displayed on TAS and so the crew were looking out for the traffic. The crewman instructor reported that a white glider had just flown 100ft over the top of the aircraft, crossing from the 11 o'clock position. The Airprox was reported to ATC and the ILS continued without incident.

He assessed the risk of collision as 'Medium'.

THE ASG29 PILOT reports that it was a difficult day for flying from a gliding perspective because the strong wind was breaking up the thermals and the only way of making any real progress was to follow the lines of energy that occur when the wind forms the thermals into 'streets'. Away from these lines of energy is often strong sinking air, which glider pilots like to avoid. He first spotted the Chinook in his 2 o'clock, it was about 1000ft lower than him, but on a heading that looked like it could be a horizontal conflict; he assumed it was climbing out of Brize and would gradually gain height. He was following one of the lines of energy and was reluctant to alter course immediately because it would have put him in sinking air, but the Chinook was still some way off and there was plenty of time to alter course. When it became apparent that it was staying on course and approaching his altitude he waggled his wings to signal that he was visual. However, because the Chinook held its course he 'S' turned to the right and then left, passing beside and then behind. By this time the vertical separation was 100 or 200ft, but because he had seen the Chinook from some distance, he knew there was no risk of collision. He was a little surprised that the Chinook had not altered course slightly, and thought about calling Brize to ask whether the Chinook pilot had seen him, but staying airborne that day was a challenge and he didn't want to divide his concentration. At the time he did wonder whether, being military pilots, they were

happy with the separation. He commented that he was content that there was no collision risk at the time, although perhaps a little peeved that, as the one without power, he was the one taking action.

He assessed the risk of collision as 'None'.

THE BENSON APP CONTROLLER reports that he was operating with App and DIR bandboxed. He had taken a handover from Brize on a Chinook inbound to Benson for an ILS. It was at 3000ft when handed over. He gave Traffic Information on an intermittent primary contact 3-4nm away and descended the Chinook to 2500ft, with own navigation to the IAF. The intermittent contact appeared again 1-2nm away and again he called it, but it faded from radar again. It reappeared for a third time in the vicinity of the Chinook, and again he called it, the pilot didn't acknowledge, but a short time later reported an Airprox with a glider, which he reported as 100ft above.

He perceived the severity of the incident as 'Medium'.

THE BENSON SUPERVISOR reports that he was sitting in the ACR next to the App controller. Workload was low. The App controller called an intermittent primary contact to the Chinook pilot. This was repeated on two further occasions until the pilot made visual contact and declared an Airprox.

Factual Background

The weather at Benson was recorded as follows:

METAR EGUB 231250Z 23012KT 9999 SCT035 BKN110 15/06 Q1017 BLU NOSIG=

Analysis and Investigation

Military ATM

The Chinook departed RAF Brize Norton and was handed over to the Benson Approach Controller at 1304 for a VOR-ILS approach to RW19. A Traffic Service was agreed. The Benson Approach Controller noted an intermittent radar contact (believed to be the ASG29) and passed Traffic Information to the Chinook pilot on 4 separate occasions (at 3nm, 2nm, 1nm and ½ nm). The final Traffic Information was passed at 1307:14 and the Airprox reported on frequency some 40 secs later.

Although the Benson Approach Controller reported the ASG29 as an intermittent radar contact, the glider could not be seen on the radar replay provided by the Radar Analysis Cell using NATS radars. The lack of a radar replay makes exact analysis of the dynamics of this Airprox difficult to assess. Although the glider pilot was visual with the Chinook throughout, this was not the same for the Chinook pilot. Despite Traffic Information on 4 occasions, the Chinook crew did not become visual with the ASG29 until it passed overhead by a reported 100ft.

UKAB Secretariat

The Chinook and ASG29 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard¹. If the incident geometry is considered as head-on or nearly so then both pilots were required to turn to the right². If the incident geometry is considered as converging then the Chinook pilot was required to give way to the glider³.

¹ SERA.3205 Proximity.

² SERA.3210 Right-of-way (c)(1) Approaching head-on.

³ SERA.3210 Right-of-way (c)(2) Converging.

Comments

JHC

The Chinook crew was attempting to complete an Instrument Rating Test and transiting from Brize to Benson for an ILS under an appropriate ATC service for the regime of flight. Once cleared own-navigation to the ILS IAF, the pilot received several ATC calls for possible traffic. The pilot reported that the initial call from ATC was 2 contacts and as he knew it was an area of known glider activity, continued with the lookout. With nothing displaying on TAS, and whilst maintaining a thorough lookout, the crewman reported a glider hand flown on top of the aircraft.

Of note, the aircraft Captain (Instructor and IRE and very glider aware) noted the fine flying day and, having a good relationship with local gliding clubs, prudently elected to bring 3 extra crewmen to assist in lookout. Had the glider pilot been able to call up Benson with a position and height it may have been beneficial. The pilot was aware of the service being provided in Class G by ATC.

BGA

Having seen the Chinook in good time, it's unfortunate that the ASG29 pilot elected not to manoeuvre earlier to ensure greater separation. UKAB has consistently advised that pilots should not assume that another aircraft has seen them.

Summary

An Airprox was reported when a Chinook and an ASG29 flew into proximity near Benson at 1308hrs on Monday 23rd April 2018. The Chinook pilot was conducting an ILS approach operating under IFR in VMC, and in receipt of a Traffic Service from Benson ATC. The ASG29 pilot was operating under VFR in VMC not in receipt of an ATS.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from the pilots of both aircraft, 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.

The Board first looked at the actions of the Chinook pilot. Members noted that he was conducting an IRT but had mitigated the possibility of reduced look-out by having another student in the jump seat and extra crewmen in the back, all looking out. They were given Traffic Information on a number of occasions by ATC but, despite all looking, they reported that they couldn't see the traffic. Members debated whether the pilot would have been wise to alter course away from the traffic information at an earlier stage but, given that ATC were reporting it as an intermittent contact 'manoeuvring' (i.e. without direction and without any height information), members were informed that the pilot had been concerned that there may have been more than one aircraft and therefore a turn might have exacerbated the conflict. Instead, he thought it more prudent to concentrate his recourses on looking ahead to ensure that their path was clear. The Board heard from military members that the Chinook crews were very glider aware and, in the past few months, had even cancelled sorties when they were made aware of increased glider activity. Despite this, some members wondered whether there had been perceived pressure to complete the IRT despite the information that there was traffic ahead of the Chinook.

Turning to the glider pilot, members thought that he too may have become task focused in his endeavours to gain lift and complete his sortie. Acknowledging that the weather conditions were challenging, members thought that at 3000ft he was not in imminent danger of needing to land out and so could have taken action earlier than he did despite the fact that the Chinook was nominally required to give way to him. Without knowing the Chinook pilot's intentions or whether he had seen him, the glider pilot could not be sure that once within close range the Chinook might not suddenly manoeuvre towards him. Members then debated whether it would have been prudent for the glider pilot to have

given Benson a courtesy call as he was transiting past the airfield, just outside the MATZ and likely to affect their radar pattern. Glider members noted that the BGA was trying to encourage glider pilots to call ATC units but that there remained some reluctance on their behalf to make radio calls. Other members who also had glider experience gave anecdotal evidence about ATC units not being very interested in generic calls, and opined that if every glider pilot were to call ATC, units might be overwhelmed. In the end, the Board agreed that it was an aspiration that glider pilots would call when passing close to airfields whenever possible, but that given this pilot's report of the weather conditions and the difficulties that he was facing in gaining lift, the old adage of *aviate, navigate, communicate*, remained pertinent.

In briefly looking at the role of ATC, the Board agreed that there was little more the controller could have done. He called the traffic on 4 occasions and, although some members wondered whether he could have offered avoiding action, ATC members were quick to point out that without a solid radar contact and with no height information it would be difficult to determine a direction. Without a call from the glider pilot the controller had no way of knowing the height of the unknown radar track, which could have been way above, or below the Chinook. Furthermore, it was for pilots to upgrade the type of service if required, not for controllers to impose it. Members also noted that Benson was one of the RAF ATC towers with a FLARM display but there was no mention of its use in any of the reports. Noting that the installation of FLARM was only an on-going trial and not certified for controlling purposes, the Board wondered whether its use could have been beneficial in this incident.

In determining the cause of the Airprox, the Board noted that both pilots had information about the other that they could have employed to greater effect. The glider pilot could have acted sooner as he saw the Chinook approaching, and the Chinook pilot could have avoided the area where he had been told there was manoeuvring traffic. As a result, the Board agreed that the cause of the incident had been inaction by both pilots, with contributory factors that the Chinook pilot had not acted on the Traffic Information that he was given by ATC and that the glider pilot had delayed his avoiding action in order to maintain thermal lift in challenging conditions. However, in assessing the risk, the Board agreed that because the glider pilot had been visual with the Chinook from some distance and therefore presumably would not have collided with it, although safety had been degraded there had been no risk of collision; risk Category C.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: Inaction by both pilots.

Contributory Factors:

1. The Chinook pilot did not act on Traffic Information.
2. The glider pilot delayed his avoiding action in order to maintain thermal lift in challenging conditions.

Degree of Risk: C.

Safety Barrier Assessment⁴

In assessing the effectiveness of the safety barriers associated with this incident, the Board concluded that the key factors had been that:

Flight Crew:

Situational Awareness and Action were assessed as **partially effective** because although the Chinook crew were given Traffic information, they didn't fully act upon it and the glider pilot delayed his avoiding action hoping that the Chinook pilot would avoid him.

⁴ The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).

Warning System Operation and Compliance were assessed as **ineffective** because the TAS in the Chinook and the FLARM in the glider were incompatible.

See and Avoid were assessed as effective because the glider pilot took avoiding action.

