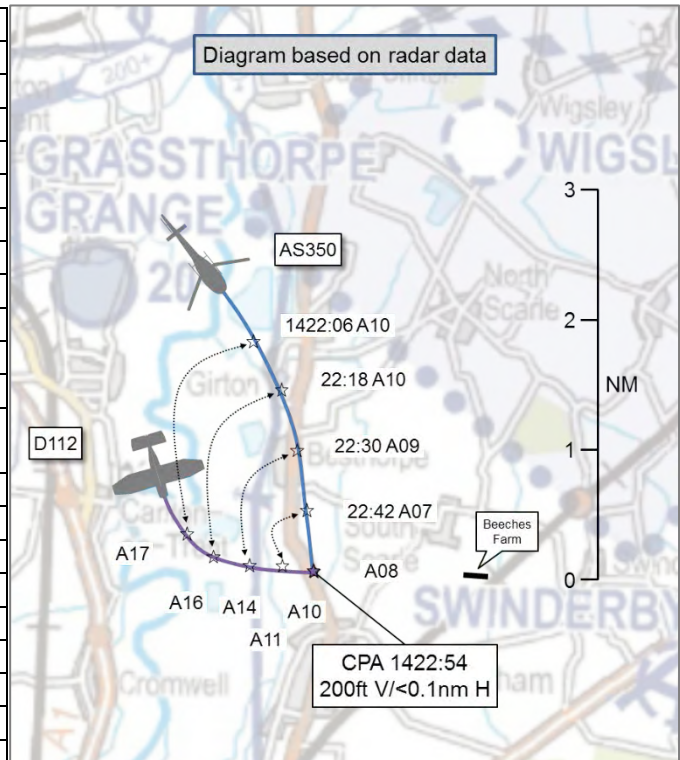


AIRPROX REPORT No 2018102

Date: 28 May 2018 Time: 1423Z Position: 5310N 00045W Location: Beeches Farm airstrip

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

| Recorded | Aircraft 1 | Aircraft 2 |
|-------------|-----------------------------|-------------------|
| Aircraft | AS350 | Jodel D112 |
| Operator | Civ Helo | Civ FW |
| Airspace | London FIR | London FIR |
| Class | G | G |
| Rules | VFR | VFR |
| Service | Listening Out | None |
| Provider | East Midlands | N/A |
| Altitude/FL | 800ft | 1000ft |
| Transponder | A, C, S | A, C, S |
| Reported | | |
| Colours | Burgundy | White, red, black |
| Lighting | Strobes, nav, landing, HISL | None |
| Conditions | VMC | VMC |
| Visibility | 8km | 10nm |
| Altitude/FL | 1200ft | NK |
| Altimeter | QNH (1020hPa) | NK |
| Heading | 190° | NK |
| Speed | 115kt | 60kt |
| ACAS/TAS | Not fitted | Not fitted |
| Separation | | |
| Reported | 150ft V/0m H | Not seen |
| Recorded | 200ft V/<0.1nm H | |



THE AS350 PILOT reports that he had tuned one radio to the East Midlands frequency but decided to try another radio because transmissions were barely readable. Whilst setting up the other radio, he looked outside to see a fixed-wing aircraft dead ahead, possibly slightly above, travelling from right to left, pretty much side-on. He immediately lowered the collective, pitched down and aimed to pass below and slightly behind the fixed-wing aircraft. He felt that he would not be able to bank and increase lateral separation in the time and distance available. The pilot noted that he did not see the other aircraft after the point at which he dived and had estimated separation at CPA based on when he last saw it.

He assessed the risk of collision as ‘High’.

THE D112 PILOT reports approaching Beeches Farm airstrip from the west, descending to 500ft to warn locally based model-aircraft flyers of his intent to land by flying down RW10, avoiding the south side of the strip where they were operating. He did not see another aircraft in proximity.

Factual Background

The weather at Waddington was recorded as follows:

METAR EGXW 281450Z 05010KT 9999 FEW022 21/15 Q1020 BLU=
 METAR EGXW 281350Z 04010KT 9999 FEW022 21/15 Q1020 BLU=

Analysis and Investigation

UKAB Secretariat

The AS350 and D112 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 converging then the AS350 pilot was required to give way to the D112². If the incident geometry is considered as overtaking then the D112 pilot had right of way and the AS350 pilot was required to keep out of the way of the other aircraft by altering course to the right³. An aircraft operated on or in the vicinity of an aerodrome shall conform with or avoid the pattern of traffic formed by other aircraft in operation⁴.

Summary

An Airprox was reported when an AS350 and a D112 flew into proximity near Beeches Farm airstrip at 1423hrs on Monday 28th May 2018. Both pilots were operating under VFR in VMC, the AS350 pilot in the process of establishing a service with East Midlands and the D112 pilot not in receipt of a service.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots and radar photographs/video recordings.

Members first considered the geometry of the event and agreed that although the AS350 pilot may have been expected to give way to traffic converging from the right, the context of the event was of a rapidly changing aspect as the Jodel pilot turned left to line-up with the Beeches Farm airstrip. At the point of CPA the aircraft were converging; however, members noted that in the run up to CPA, the Jodel would likely have presented a fixed point to the AS350 pilot, albeit with a banked aspect, and consequently wasn't detected earlier. Members also discussed the AS350 pilot's cockpit management workload and agreed that although he was operating appropriately, his lookout had been degraded by the radio management task and that this had been a contributory factor. Members also surmised that the Jodel pilot's lookout had been directed towards the airstrip as he approached, also underlining the need to maintain a robust all-round lookout at all times. One member opined that by transiting at 1000ft, the AS350 pilot was operating at or around the potential circuit height of unknown strips, and that there had been an opportunity for him to fly at 1500ft or more in order to provide a greater buffer against such traffic. This was an important consideration in areas where numerous strips with unknown levels of activity might easily be located.

In the event, the Board agreed that the cause of the Airprox was a late sighting by the AS350 pilot and a non-sighting by the Jodel pilot. Some members considered the degree of risk merited an 'A' classification, in that it was purely a matter of providence that the Jodel had flown into the AS350 pilot's field of view with sufficient range and time to take avoiding action. After some discussion and analysis of the radar picture, it was agreed that in this instance the AS350 pilot's actions had materially increased separation and that the degree of risk was therefore 'B', safety had been much reduced below the norm.

PART C: ASSESSMENT OF CAUSE AND RISK

| | |
|-----------------------------|---|
| <u>Cause:</u> | A late sighting by the AS350 pilot and a non-sighting by the Jodel pilot. |
| <u>Contributory Factor:</u> | The AS350 pilot's lookout was degraded by cockpit management tasks. |
| <u>Degree of Risk:</u> | B. |

¹ SERA.3205 Proximity.

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

³ SERA.3210 Right-of-way (c)(3) Overtaking.

⁴ SERA.3225 Operation on and in the Vicinity of an Aerodrome.

Safety Barrier Assessment⁵

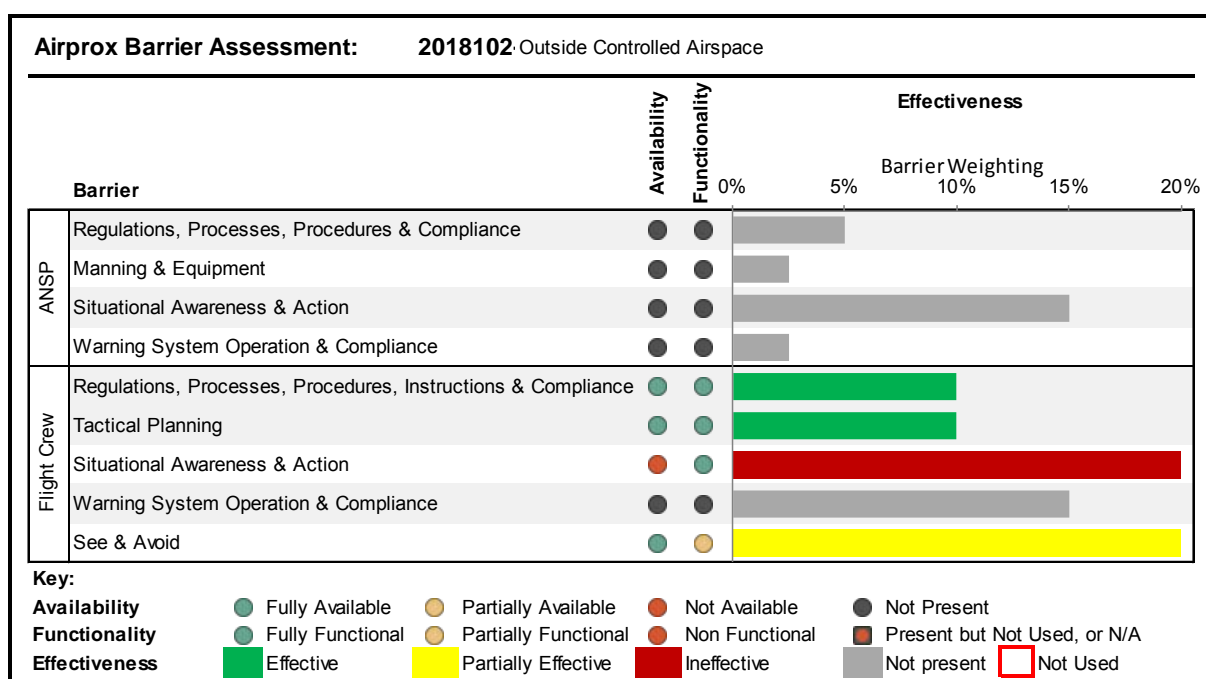
In assessing the effectiveness of the safety barriers associated with this incident, the Board concluded that the key factors had been that:

Flight Crew:

Situational Awareness and Action were assessed as **ineffective** because neither pilot was aware of the other aircraft and hence could not take timely action.

Warning System Operation and Compliance were assessed as **not used** because neither aircraft was fitted with a TAS.

See and Avoid were assessed as **partially effective** because the D112 pilot did not see the AS350 and the AS350 pilot saw the D112 at a late stage when he could only take emergency avoiding action.



⁵ The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).