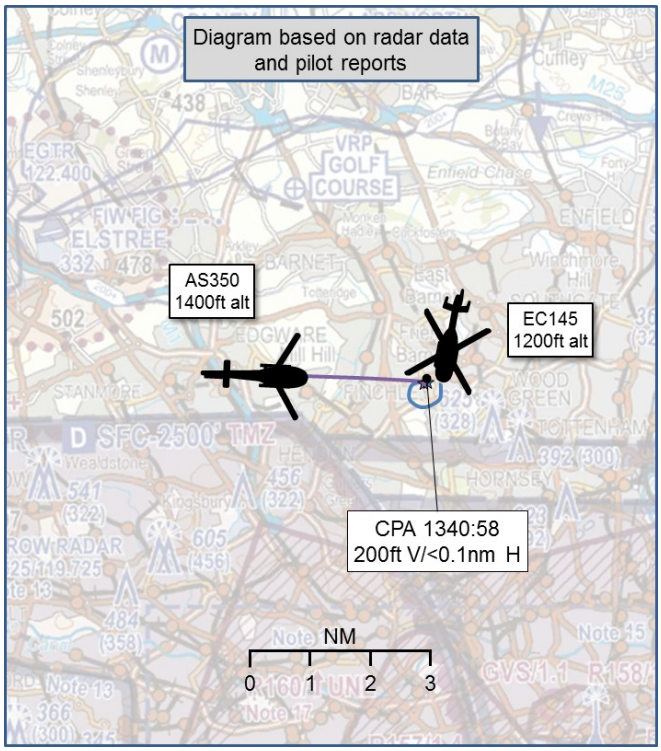
AIRPROX REPORT No 2017206

Date: 25 Aug 2017 Time: 1340Z Position: 5136N 00009W Location: Finchley

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	EC145	AS350
Operator	NPAS	Civ Pte
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Basic	Establishing
Provider	Heathrow SVFR	Heathrow SVFR
Altitude/FL	1200ft	1400ft
Transponder	A, C, S	A, C
Reported		
Colours	Blue, Yellow	Black
Lighting	Nav, Strobe	Beacon, Position
Conditions	VMC	VMC
Visibility	10km	>10km
Altitude/FL	1300ft	1400
Altimeter	QNH (1017hPa)	QNH (1016hPa)
Heading	240°	095°
Speed	80kt	120kt
ACAS/TAS	TCAS I	Not fitted
Alert	TA	N/A
Separation		
Reported	100ft V/500m H	75ft V/0m H
Recorded	200ft V/<0.1nm H	



THE EC145 PILOT reports that ATC informed him of traffic at the same height approaching from the west. He gained visual contact with the traffic but was unable to call visual on frequency due to the very high number of aircraft transmitting. At this stage he was in a right-hand orbit overhead his tasking area. As he made a second orbit, looking as far right as possible, he regained visual conflict with the AS350, which had maintained its converging track and appeared to decelerate. He took avoiding action by descending and tightening the right turn. The AS350 did not appear to deviate from its track. When a break on frequency occurred, he reported the Airprox with ATC.

He assessed the risk of collision as 'High'.

THE AS350 PILOT reports that he was monitoring the Heathrow SVFR frequency in preparation to call them as he would be entering their airspace. He heard the controller tell another helicopter that it had traffic in its 12 o'clock position, same altitude opposite direction. He quickly looked ahead and around for any traffic for situational awareness and saw a helicopter in his 12 o'clock position. He called Heathrow SVFR but was told to standby. As he waited for the call back he saw the other helicopter turn south to the left. The EC145 was moving away from his path to his right and was now at a slightly lower altitude to him. He continued on his path, and the Heathrow SVFR controller came back to him with a transponder code and said he had him in radar contact. He replied and told the controller that he had the other helicopter in sight below him. The other helicopter had turned back towards him and was slightly below. At that time, he noticed that it was a police helicopter and the Heathrow SVFR controller confirmed this. Heathrow SVFR told him to maintain below 1500ft for his flight, which he complied with. He does not believe the police helicopter had him visual until he had reported the EC145 beneath him. He continued on his path towards Banbury Reservoir for a turn south down the Lea Valley.

He assessed the risk of collision as 'Medium'.

THE HEATHROW SVFR CONTROLLER reports that it was a very busy period and he was conducting a controller handover. Traffic Information was passed to the EC145 pilot that a 7000 squawk was tracking towards him at the same level. The AS350 pilot had called on the RT at the time but was told to standby due to workload/controller handover. The oncoming controller took over from the off-going controller and instructed the AS350 pilot to squawk 7052; this was roughly the time the AS350 passed the EC145. He then gave the AS350 pilot a Basic Service and cleared him to enter the EGLC control zone. It was roughly about 3-5minutes after the event that the EC145 pilot asked to file an Airprox against the AS350 inbound to the Vanguard Heliport.

Factual Background

The weather at London City was recorded as follows:

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METAR EGLC 251320Z AUTO VRB03KT 9999 NCD 23/12 Q1017
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Analysis and Investigation

CAA ATSI

The EC145 was in receipt of a Basic Service from the Heathrow Special VFR controller at the time of the Airprox. The AS350 had established two way communications with the Heathrow Special VFR controller and had been instructed to standby due to the controller being in the middle of handing over the operational position to another controller. As such the controller was not in receipt of the full details of the flight when the Airprox occurred, and the AS350 was not yet in receipt of a service.

At 1324:20 the EC145 called the Heathrow Special VFR controller and advised them that the aircraft would be on task to the north of the London City Zone. A Basic Service was agreed.

At 1336:20 the Heathrow Special VFR frequency was very busy and aircraft were told to standby while the controller was engaged in a handover of the operational position to another controller.

At 1338:16 the AS350 contacted the Heathrow Special VFR controller and was told to standby (the controller was still engaged in the handover of the operational position). The AS350 was observed on the radar replay to be west of the EC145 by 4.5nm at this time (Figure 1).

At 1339:30 the handover was still in progress and the outgoing controller passed Traffic Information to the EC145 on unknown traffic, to the west, at a similar altitude (this subsequently turned out to be the AS350) (Figure 2).

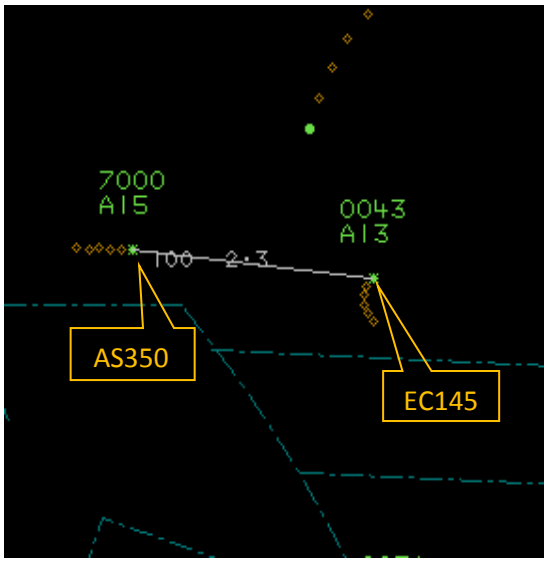


Figure 1 – 1338:16

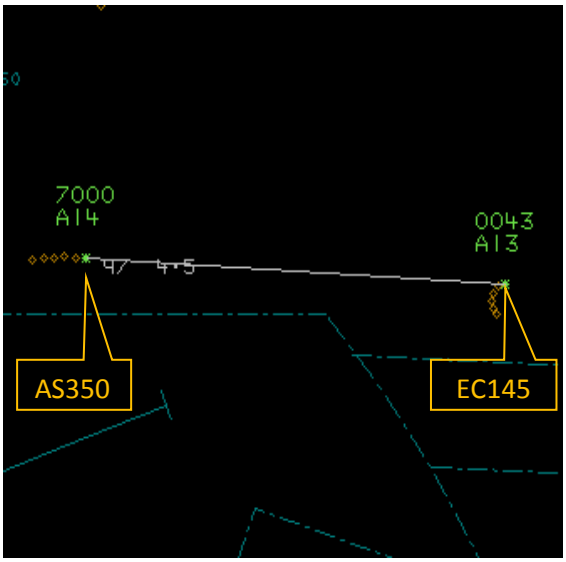


Figure 2 – 1339:30

At 1339:40 the controller handover appeared to be complete and the incoming controller was engaged in a lengthy exchange with another aircraft pilot who was making their initial call. Following this exchange there were further aircraft calls taking up the attention of the controller.

At 1340:40 the controller issued the AS350 with code 7052 and the pilot reported that they were visual with a helicopter below them. The controller advised that this was the EC145.

CPA occurred at 1340:58 when the radar returns merged (Figure 3).

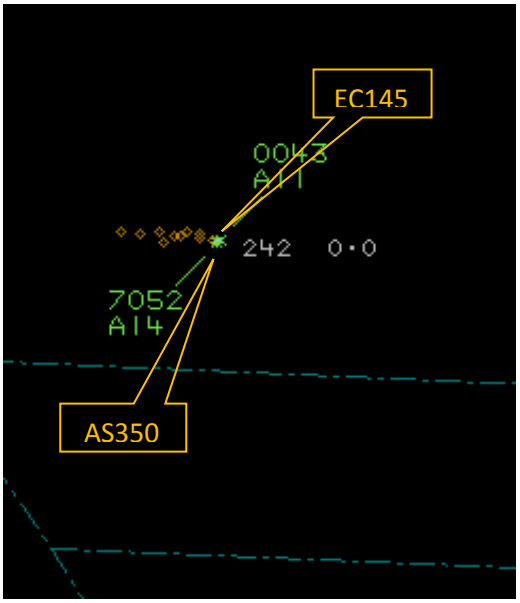


Figure 3 - 1340:58

At 1342:00 the AS350 was identified, a clearance issued and a Basic Service agreed.

At 1344:20 the EC145 advised the controller that they would like to file an Airprox against the AS350 and provided the controller with the registration of the AS350.

CAP774 (UK Flight Information Services) extract:

> *A Basic Service is an ATS provided for the purpose of giving advice and information useful for the safe and efficient conduct of flights. This may include weather information, changes of serviceability of facilities, conditions at aerodromes, general airspace activity information, and any other information likely to affect safety. The avoidance of other traffic is solely the pilot's responsibility.*
>
> *Basic Service relies on the pilot avoiding other traffic, unaided by controllers/ FISOs. It is essential that a pilot receiving this ATS remains alert to the fact that, unlike a Traffic Service and a Deconfliction Service, the provider of a Basic Service is not required to monitor the flight.*

Despite the R/T being almost continuous and a handover/takeover of the operational position taking place, the outgoing Heathrow Special VFR controller still managed to pass traffic information to the EC145 on the AS350, albeit that the AS350 was unknown traffic to the controller at the time. When the AS350 was issued with transponder code 7052 by the incoming controller, the AS350 pilot advised the controller that they were visual with the EC145 below them.

UKAB Secretariat

The EC145 and AS350 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard[1].

[1] SERA.3205 Proximity.

Comments

NPAS

While not in any way removing the obligation to comply with the Rules of the Air and responsibility for effective lookout, the dynamic nature of Police tasks, which are often carried out at relatively low level, is worthy of being given a wide berth laterally if circumstances allow. Equally, operations at lower levels can preclude the use of Traffic and Deconfliction Services outside controlled airspace due to radar performance, as does the perception of distraction from the task in hand in the minds of operating crews. Although an extra burden on both ATC and operating crews NPAS will consider revising its operating procedures to ensure the highest level of ATC service, commensurate with the task and location, is requested.

Summary

An Airprox was reported when an EC145 and an AS350 flew into proximity at 1340 on Friday 25th August 2017. Both pilots were operating under VFR in VMC, the EC145 pilot in receipt of a Basic Service from Heathrow SVFR and the AS350 pilot establishing a Service from Heathrow SVFR.

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 began by discussing the actions of the AS350 pilot. A helicopter Board member commented that the AS350 was outside controlled airspace and still in the process of establishing a clearance to join controlled airspace. As such, he was not constrained by a height restriction prior to the Airprox, and could have climbed to fly above or route around the EC145 on its operational task. He went on to note that the AS350 pilot had reported that he had become visual with the EC145 just after the latter had been given Traffic Information on his aircraft. Noting that this Traffic Information had been given at a separation of about 4.5nm, he surmised that the AS350 pilot had become visual with the EC145 at about 4nm but had simply monitored the EC145 rather than attempt to alter course or height. In his opinion, the helicopter member thought it would have been reasonably obvious that the EC145 was on a task, and that the prudent course of action would have been for the AS350 pilot to have increased the separation between the two helicopters.

Turning to the actions of the EC145 pilot, one member opined that the EC145 pilot could also have temporarily suspended his task having been given Traffic Information on the AS350. Although the helicopter Board members agreed, they pointed out that the nature of the EC145 pilot's task would likely be that, in doing so, the task would be compromised. As a result, NPAS pilots would understandably be reluctant to manoeuvre until the last minute. They also commented that the nature of the operation attracts a very high workload, especially when operating in busy and constrained airspace, which includes listening to multiple radio frequencies whilst maintaining terrain and airspace avoidance. There would also be pressure to complete the task as quickly as possible to release the ground resources and clear the airspace and any associated restrictions. This results in NPAS pilots relying to an extent on the good airmanship of other pilots transiting close to their operational area to remain clear by a wide berth.

The Board then looked at the actions of ATC and agreed that, at the time, the controller's workload was high. The EC145 was on only a Basic Service, and therefore the controller was focused on the aircraft on a higher level of service. Some controller members opined that the controller may also have been distracted by handing over the operational position to the oncoming controller, which possibly diverted his attention. Regardless the Board agreed that the controller had done all that was required within a high workload situation, to the extent that he had also managed to provide Traffic Information to the EC145, which was under only a Basic Service.

The Board then looked at the cause and risk of the Airprox. They opined that the AS350 pilot had seen the EC145 early enough to ascertain that it was carrying out a task which he could have altered his course to avoid. Therefore, the Board agreed that the incident was best described as the AS350 pilot flew into conflict with the EC145. Turning to the risk, the Board agreed that both pilots were visual with the other aircraft but that it was only the EC145 pilot who had taken action to avoid the AS350 by descending at a relatively late stage. Having also agreed that the AS350 pilot's inaction had compromised separation, they assessed the risk as Category B.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: The AS350 pilot flew into conflict with the EC145.

Degree of Risk: B.

Safety Barrier Assessment[2]

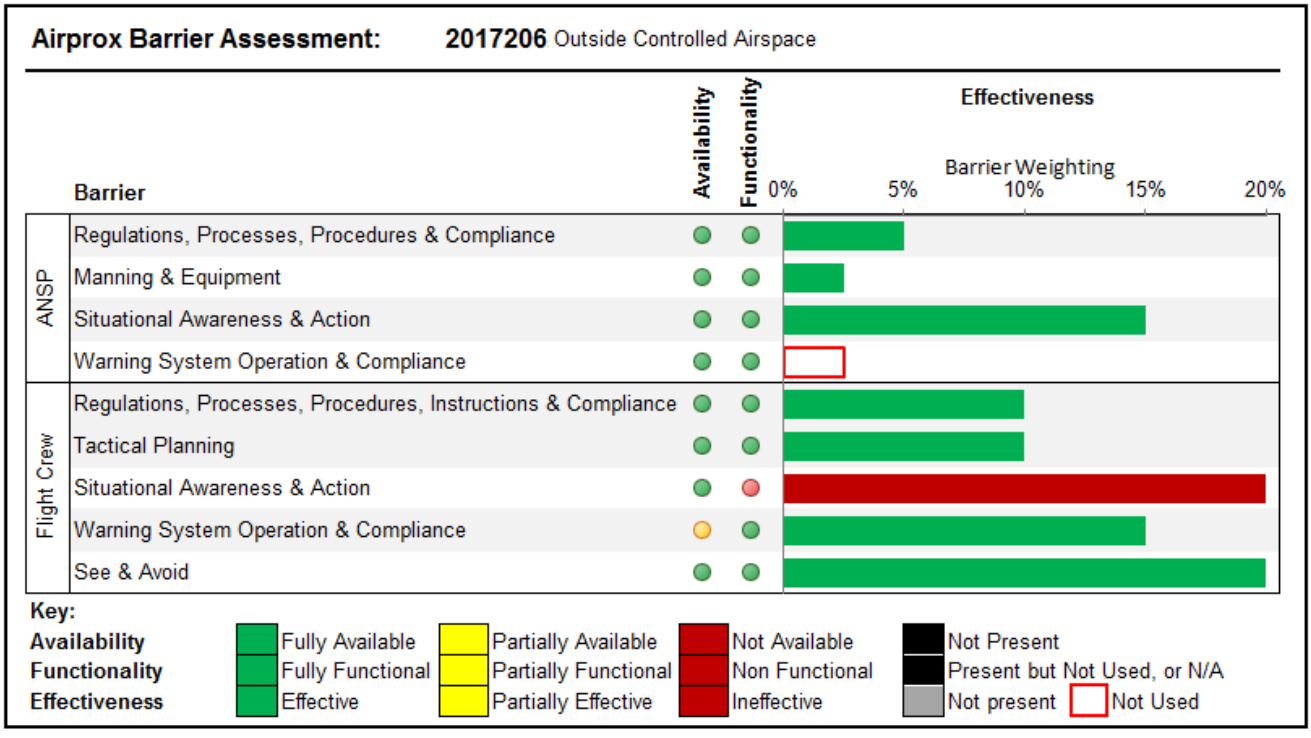
In assessing the effectiveness of the safety barriers associated with this incident, the Board concluded that the key factors had been that:

ANSP:

Warning System Operation and Compliance were assessed as **not used** because, although Swanwick have the facility for STCA, the practical application outside controlled airspace at lower levels is not currently operationally viable.

Flight Crew:

Situational Awareness and Action were assessed as **ineffective** because although the AS350 pilot was visual with the EC145 and could have been expected to reasonably assume the pilot was flying a task, he did not alter his course to avoid the EC145.



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