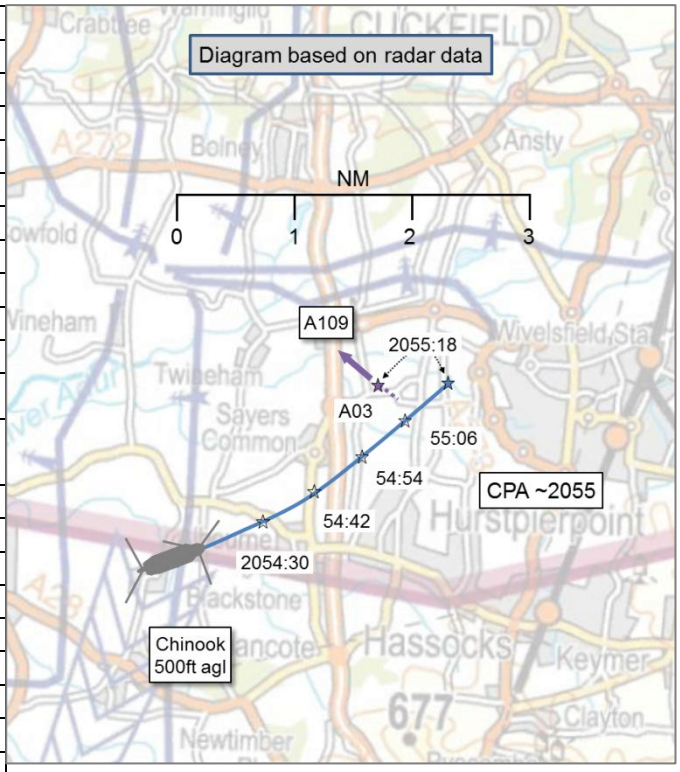
AIRPROX REPORT No 2015104

Date: 8 Jul 2015 Time: 2055Z Position: 5058N 00010W Location: 10nm S Gatwick Airport (Night)

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Chinook	A109
Operator	HQ JHC	Civ Comm
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Listening-out	Basic
Provider	Gatwick Radar	Gatwick Radar
Altitude/FL	400ft	300ft
Transponder	A/C/S	A/C/S
Reported		
Colours	Green	Black
Lighting	Nav, HISL, landing.	Strobes, HISL, nav, landing
Conditions	VMC	VMC
Visibility	10km	>10km
Altitude/FL	500ft	75ft
Altimeter	QNH	QNH
Heading	080°	270°
Speed	NK	15kt
ACAS/TAS	Not fitted	TAS
Alert	N/A	Nil
Separation		
Reported	150ft V/NK H	NK
Recorded	NK	



THE CHINOOK PILOT reports that, while approaching an Initial Point at 500ft agl (to the south of Gatwick), the No 1 Crewman reported a small helicopter passing underneath the aircraft by approximately 150ft. The crew reduced speed and noted the position, attempting to identify the helicopter which was by then behind the Chinook on a divergent heading. It was described as a small helicopter with a single strobe and both position lights. Due to the time of day, the light levels were moderate to low, but still too bright for night vision goggles be used. The UHF low-level frequency was being monitored, and the crew were listening out on the Gatwick Approach frequency with a listening squawk. No relevant calls were heard on either frequency. The small helicopter continued on a constant path behind the Chinook with both crewmen now identifying it but being unable to provide clear details due to fading light levels.

He assessed the risk of collision as 'Medium'.

THE AGUSTA A109 PILOT reports that, as he lifted from a private helicopter landing site (HLS) north-east of Burgess Hill, he saw a low-level Chinook heading north with a track that was taking it just to the east of his HLS. His own departure track was west, away from the Chinook, and so he continued outbound asking Gatwick if they were working the traffic. They advised him that they were not working a low-level military aircraft north-bound, and he continued his flight back to base.

He assessed the risk of collision as 'Low'.

THE GATWICK CONTROLLER reports that he was not aware of the presence of the Chinook.

Factual Background

Sunset was at 2017. The Gatwick weather was recorded as follows:

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EGKK 082050Z 29011KT 9999 FEW049 16/08 Q1017=
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Analysis and Investigation

CAA ATSI

The Chinook pilot reported the Airprox whilst on a low-level flight to the south of the Gatwick CTA, tracking north east. The pilot reported listening out on the Gatwick Approach frequency but was not in receipt of an Air Traffic Service and no RT calls were recorded. The A109 pilot had previously transited through the Gatwick CTR from the north, and had landed at a private landing site to the south of the CTR, fadeing from radar coverage approximately 10nm south of Gatwick at 2053:00.

At 2055:08 the A109 pilot called Gatwick Radar, lifting from the landing site, and reported visual with the Chinook. At 2055:18 the A109 appeared on radar (code 3750 - Figure 1), approximately 10nm south of Gatwick, just as the Chinook (code 0012) passed to the east of this position. The controller was not working the Chinook.

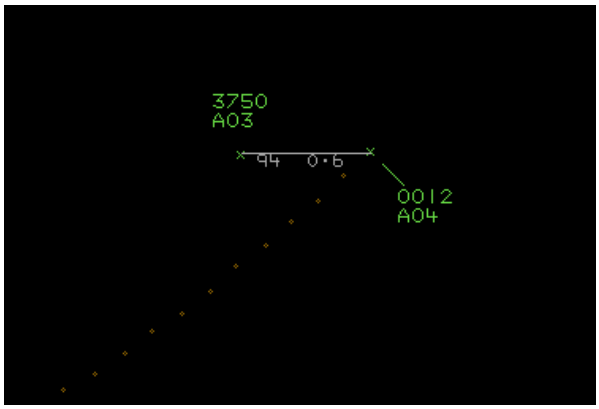

Figure 1 - Swanwick MRT at 2055:18

The A109 pilot continued on a north westerly direction as it climbed (Figure 2). CPA had already occurred and, although Figure 1 shows a distance of 0.6nm and 100ft vertical, it is likely that there was less horizontal distance between the two aircraft just prior to this screen shot. Once the A109 had been formally identified (at 2055:55), a Basic Service was agreed. The Airprox occurred at about the time the A109 pilot was lifting from the landing site and making the initial RT call.

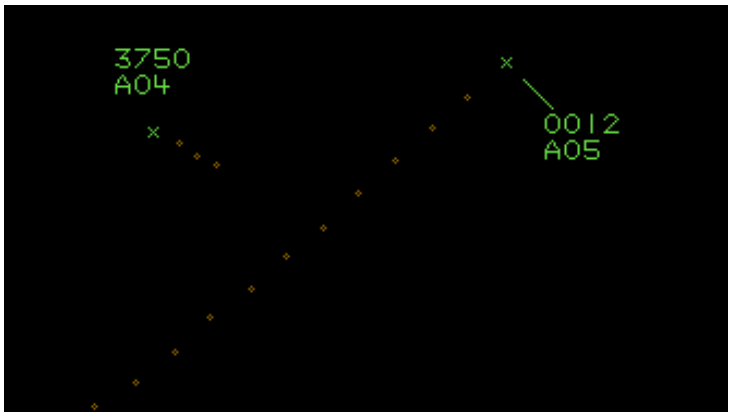

Figure 2 - Swanwick MRT at 2055:32

UKAB Secretariat

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

Comments

JHC

The Gatwick frequency was particularly busy so the Chinook crew opted to listen out only (and squawk accordingly). Unfortunately the crew did not hear the A109 pilot's lifting call, and were unaware of its presence. The Chinook fleet is undergoing TCAS fitment at the moment, which may help prevent this situation developing in the future.

Summary

The Airprox occurred at night in Class G airspace approximately 10nm south of Gatwick airport. Both pilots were operating under VFR, in VMC. The A109 pilot was lifting from a private landing site, prior to contacting Gatwick Approach. The Chinook pilot was 'listening out' on the same frequency. He reported that a crew-member had seen a small helicopter passing underneath the aircraft by approximately 150ft. The A109 pilot reported having seen the Chinook at low-level heading north with a track that was taking it just to the east of his landing site. Radar recordings did not show the CPA but, just after it had occurred, the separation was shown as 100ft vertical and 0.6nm horizontal.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from both pilots, area radar and RTF recordings and reports from the appropriate ATC and operating authorities.

The Board first discussed the actions of the Chinook crew. The JHC member confirmed that the Chinook crew had been listening-out on the Gatwick Approach frequency, but had not heard any call from the A109 pilot saying he was lifting from his site. The JHC member commented that the Chinook crew had not contacted the frequency because it had been busy at the time, and the Civil Helicopter member commented that they may not have considered it necessary to have made the call anyway because they would quite reasonably have not expected the presence of conflicting traffic getting airborne at low-level in their vicinity at night.

Turning to the actions of the A109 pilot, some members wondered whether he could have seen the Chinook before lifting from his site. However, it was agreed that, not knowing the characteristics of the site, or whether the pilot would have had an open view of the countryside, it was not possible to determine an answer. Some members wondered whether the A109 pilot might have conducted a clearing turn after lifting and prior to departing but, again, it was acknowledged that, even had he done so, the characteristics of the site might easily have obscured the Chinook until it was right on top of the HLS

In considering the cause of the Airprox, the Board opined that the Chinook crew, cruising at 500ft, were undoubtedly surprised to see a helicopter suddenly appear near their track. In this respect, it was noted that judging distance at night is more difficult than in daylight and that, accordingly, the sudden appearance of lights could have led to an underestimated separation between the two aircraft by the Chinook crew. With this in mind, looking at the Chinook's radar track relative to the HLS led the Board to agree that, contrary to the Chinook pilot's report, the A109 had probably not in fact been underneath the Chinook when it was sighted. They therefore considered that the root of the Airprox was that, at night, the Chinook pilot had understandably been concerned by the unexpected proximity of the A109.

[1] SERA.3205 Proximity.

Turning to the risk, the Board reflected on the fact that the A109 and Chinook pilots had both seen each other shortly after the A109 had lifted, and that this was probably at, or very near to, CPA. They noted that the A109 pilot had reported that the Chinook had passed to the east of his landing site, routing away from his track, and that neither pilot had needed to take any avoiding action to control the situation. As a result, and taking into account the radar recordings of 100ft vertical and 0.6nm horizontal separation between the aircraft just after CPA, the Board opined that although they were undoubtedly closer than normal procedures would desire, there had in fact been no risk of a collision; consequently, the Airprox was categorised as risk Category C.

The Board were heartened to hear from the JHC member that the Chinook fleet was in the process of having TCAS fitted. They opined that this would probably have provided the Chinook aircrew with warnings of the A109's presence, and might thus have either cued them to sight it visually or to avoid the HLS by a wider margin.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: The Chinook pilot was concerned by the proximity of the A109.

Degree of Risk: C.