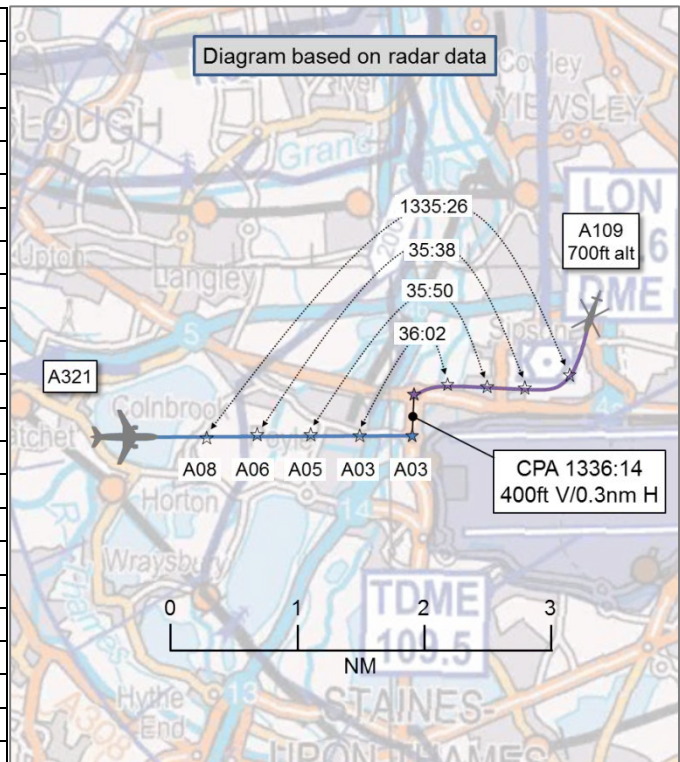


AIRPROX REPORT No 2016035

Date: 14 Mar 2016 Time: 1336Z Position: 5129N 00030W Location: Heathrow

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	A321	A109
Operator	CAT	HQ Air (Ops)
Airspace	London CTR	London CTR
Class	D	D
Rules	IFR	VFR
Service	Aerodrome	Aerodrome
Provider	Heathrow TWR	Heathrow TWR
Altitude/FL	300ft	700ft
Transponder	A, C, S	A, C, S
Reported		
Colours	Company	White, red stripe
Lighting	NK	Landing, nav, beacon
Conditions	VMC	VMC
Visibility	30km	NK
Altitude/FL	500ft	NK
Altimeter	QNH	NK
Heading	NK	NK
Speed	130kt	NK
ACAS/TAS	TCAS II	Not fitted
Alert	TA	N/A
Separation		
Reported	300ft V/1nm H	NK
Recorded	400ft V/0.3nm H	



THE AIRBUS A321 PILOT reports that he was established on the Heathrow MLS RW09L. A white Agusta helicopter was routing west along Bath Road and, prior to passing behind and under his approach path, he considered that it came too close to him. It caused him to consider going around but, because there was no risk of collision, he continued the approach.

He assessed the risk of collision as 'None'.

THE AGUSTA A109 PILOT reports that he was first advised about the Airprox on 22nd March. His recollection of the Heathrow crossing was that it was carried out in accordance with the procedures for the westerly end of Heathrow. He considered that there was no perceived threat from the A321.

He assessed the risk of collision as 'Low'.

THE HEATHROW AIR ARRIVALS CONTROLLER reports that he was carrying out Easterly Air North Arrivals in perfect weather. The A109 approached the airport from the north with the intention of crossing to the south side of the airport and land on the Helicopter Aiming Point. Following standard procedures, he instructed the helicopter pilot to hold at Longford. He then passed Traffic Information to the A321 pilot advising the crew that the helicopter would cross behind. He then instructed the A109 pilot to cross RW09L after the A321, to route west of Terminal 5, and then direct to Stanwell. After vacating RW09L, the A321 pilot came back on the frequency querying what separation was provided against the helicopter, to which he replied 'visual separation'. The crew of the A321 later telephoned the VCR Supervisor seeking clarification.

Factual Background

The weather at Heathrow was recorded as follows:

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METAR EGLL 141320Z AUTO 07011KT 040V100 NCD 10/M01 Q1032 NO SIG=
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Analysis and Investigation

CAA ATSI

ATSI had access to reports from the pilots of both aircraft, the Heathrow Tower Arrivals controller, the area radar recordings and a recording of the Heathrow Tower frequency. Screenshots produced in this report are provided using the area radar recordings. Levels indicated are altitudes. All times UTC.

The A321 (code 3536) was operating IFR on a scheduled passenger flight inbound to London Heathrow Airport where RW09L was in use for arrivals. At the time of the Airprox, the A321 pilot was on a 0.5nm final. The pilot was in receipt of an Aerodrome Control Service from Heathrow Tower (AIR Arrivals). The A109 (code 7032) was operating VFR inbound to London Heathrow and, at the time of the Airprox, was 0.3nm north of the RW09L extended centreline. The A109 pilot was also in receipt of an Aerodrome Control Service from the same controller.

At 1332:21, the A321 pilot called Heathrow Tower established on the Microwave Landing System (MLS) for RW09L at 8.5nm. The A321 was No2 in the approach sequence following another A321, and the Heathrow Arrivals controller instructed the A321 pilot to continue the approach. At 1332.46, the A109 was observed on the area radar recording 0.4nm south-southeast of RAF Northolt indicating 500ft.

At 1334:08 (Figure 1), the Heathrow controller passed Traffic Information to the A321 pilot regarding the A109 approaching Heathrow from the north; the controller advised the A321 pilot that the A109 would probably pass behind. At this time the A109 pilot had not called Heathrow Tower.

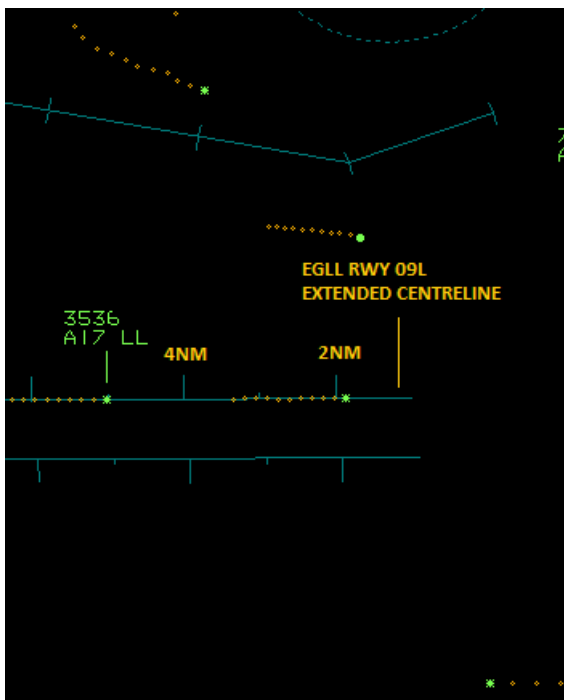


Figure 1 – Swanwick MRT at 1334:08.

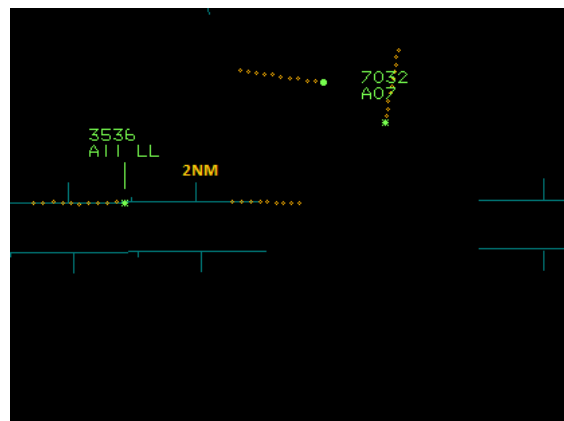


Figure 2 – Swanwick MRT at 1335:00.

At 1335:00 (Figure 2), the A109 pilot called Heathrow Tower approaching Sipson. The Heathrow Arrivals controller instructed the A109 pilot to route westbound and hold at Longford (approximately 0.47nm northwest of the displaced RW09L threshold).

At 1335:42 (Figure 3), the Heathrow Arrivals controller cleared the A321 pilot to land on RW09L. At this time the A321 was on final approach at 1.6nm. The A109 was 1.9nm east-northeast of the A321 and indicating 700ft.

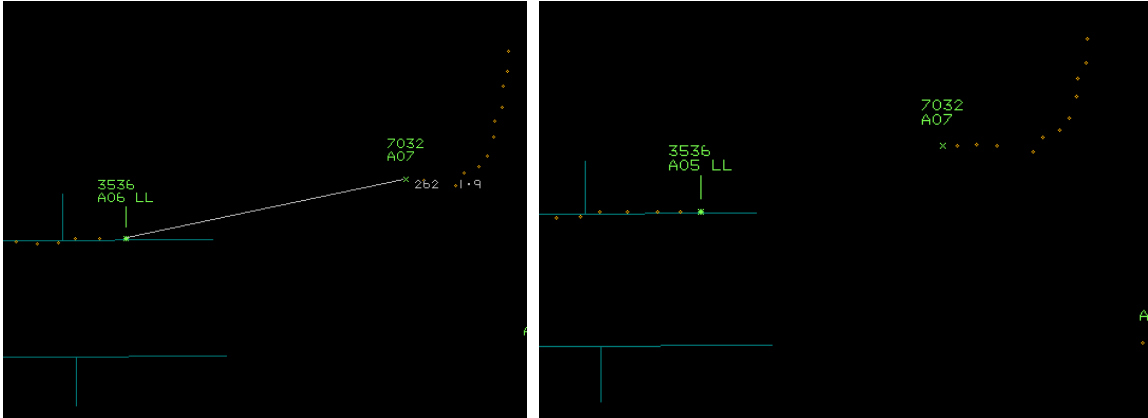


Figure 3 – Swanwick MRT at 1335:42. Figure 4 – Swanwick MRT at 1335:50.

At 1335:50 (Figure 4), the Heathrow Arrivals controller issued a conditional clearance for the A109 pilot to pass behind the landing A321 and cross RW09L. At this time the A321 was on final approach at 1.3nm. The condition was read back by the A109 pilot; however, the A109 pilot read back the aircraft type as a Boeing 777. This was immediately corrected by the controller who stated that the traffic was the A321 on short final for RW09L. The A109 pilot then called visual with the A321. The recorded surveillance data suggests that the A109 reached Longford coincident with the A109 pilot reporting the A321 in sight.

CPA occurred at 1336:14 (Figure 5), with a minimum lateral distance of 0.3nm and a minimum vertical distance of 400ft just as the A109 pilot commenced a left-turn to route southbound through the RW09L final approach.

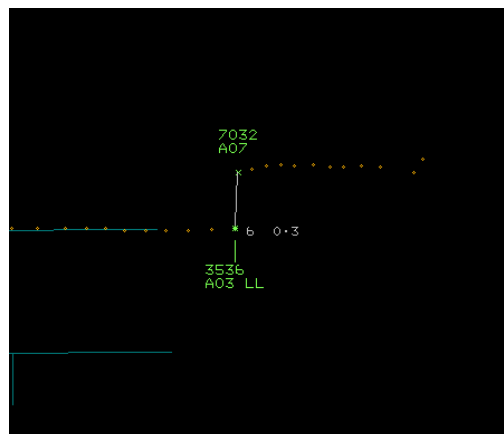


Figure 5 – Swanwick MRT at 1336:14 (CPA).

Within Class D controlled airspace, controllers are not required to separate IFR aircraft from VFR. Traffic Information will be passed to IFR flights on VFR flights and traffic avoidance advice given when requested. Traffic Information will be passed to VFR flights on all other flights and traffic avoidance advice given when requested.¹

¹ CAP 493 Manual of Air Traffic Services Part 1, Section 1, Chapter 2, Paragraph 2.1.

Heathrow has locally applied operating minima for VFR and SVFR helicopter arrivals. For a VFR helicopter arrival at Heathrow by day, the visibility must be 5km or more with a cloud ceiling of 1500ft or greater. At the time of the Airprox the prevailing weather conditions were good with visibility in excess of 10km and no reported cloud.

The A109 pilot approached Heathrow Airport from the north via Sipson. On reaching Sipson, the Heathrow Arrivals controller instructed the A109 pilot to take up a westerly track towards Longford initially to hold at Longford. This route is published both in the UK AIP and the Heathrow Manual of Air Traffic Services Part 2 to enable the crossing of helicopters through the RW09L final approach. The route in its entirety is Sipson-Longford-West of Terminal 5-Stanwell-Bedfont. A chart of the London Heathrow-Helicopter crossing Operations is reproduced in Figure 6.

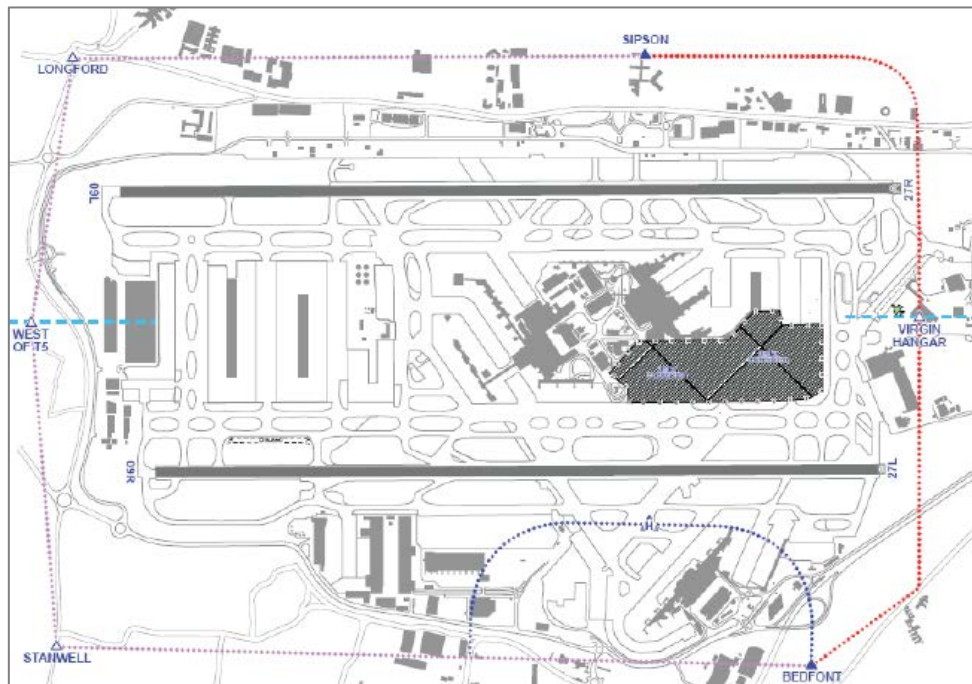


Figure 6 – London Heathrow – Helicopter Crossing Procedures.

The following is promulgated in the London Heathrow Airport Local Traffic Regulations:

'Helicopters will be instructed by ATC to route Sipson-Longford to hold. When a suitable gap in the 09L landing stream exists, ATC will pass traffic information on a fixed-wing landing aircraft and issue a crossing clearance behind. The helicopter will cross in the gap as close to the runway threshold as possible (this may be before Longford) and as expeditiously as possible. Once south of the runway the helicopter will route to the west of Terminal 5 and rejoin the route; West of Terminal 5-Stanwell-Bedfont (and must remain west of 09R). If there is inbound traffic on the approach of 09R no clearance will be issued beyond Longford. On completion of the route, hold at Bedfont unless instructed otherwise by ATC'. (UK AIP AD 2.EGLL-22 Chapter 5 refers).

UKAB Secretariat

The A321 and A109 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard². 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 operation³.

² SERA.3205 Proximity.

³ SERA.3225 Operation on and in the Vicinity of an Aerodrome.

Comments

HQ Air Command

It appears from the information provided, that this incident resulted from a perceived loss of separation whilst all parties were following the recognised and well promulgated procedures for operations in the vicinity of Heathrow. The Northolt based A109 was following the promulgated Helicopter Crossing Procedures for a southbound crossing of RW09L; a regular occurrence for this Unit. As stated in the ATSI report, the procedure calls for helicopters to transit westbound from Sipson-Longford for a hold; a position located about 700m from the RW09L threshold to provide wake vortex and ATC visual separation only. Although there appears to have been a read-back error from the pilot of the A109, this was corrected immediately by the Heathrow Controller and the A109 pilot acted in accordance with his clearance.

Summary

An Airprox was reported when an A321 and an A109 flew into proximity at 1336 on Monday 14th March 2016. The A321 pilot was operating under IFR in VMC, the A109 under VFR in VMC. Both pilots were in receipt of an Aerodrome Control Service from the Heathrow Arrivals controller. The A109 pilot had been instructed to cross the RW09L approach behind the landing A321, which he had reported in sight.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

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

The Board first noted that in the Class D airspace of the London CTR a controller is not required to separate IFR and VFR flights but is required to pass appropriate Traffic Information to both pilots, which he did. The A321 pilot, on approach to RW09L, had been advised of the presence of the A109 approaching from the north, and was informed that it would cross behind him; the A109 pilot, carrying out the Heathrow crossing procedure via Sipson to Longford, was issued with a conditional clearance to cross RW09L behind the landing A321 on short-final.

The Board noted that both pilots were visual with each other well before the incident, and both knew the others' intentions. The A109 pilot had reported visual contact with the A321 as he approached Longford and had turned to cross behind it. Civil Helicopter members, with experience of operating in the vicinity of Heathrow, commented that this operation was a regular occurrence for helicopter traffic wishing to cross RW09L. HQ Air Command also confirmed that this was a regular occurrence for their A109 pilots. Members wondered why the A321 pilot had then reported that the A109 had come 'too close to him'. Looking at the radar tracks, it was clear that the A109 was following the published procedure and, after a short discussion, members could only speculate that the A321 pilot may have perceived its track as being a threat perhaps as a result of not being familiar with Heathrow helicopter crossing procedures and/or the fact that VFR traffic is only required to visually separate itself from IFR traffic in Class D airspace. It was clear that the A321 pilot had filed an Airprox report because he had been concerned about the proximity of the A109, and this was considered to be the cause of the Airprox.

CPA had occurred as the A109 passed 0.3nm north of the A321, at which time it was 700ft above it. It was readily apparent to the Board that there was no possibility of the aircraft colliding at this point. Because the A109 pilot had complied with ATC instructions in accordance with local procedures, the Board considered that normal procedures and safety parameters had pertained during the incident. Therefore the Board assessed the Airprox as risk Category E.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: The A321 pilot was concerned about the proximity of the A109.

Degree of Risk: E.