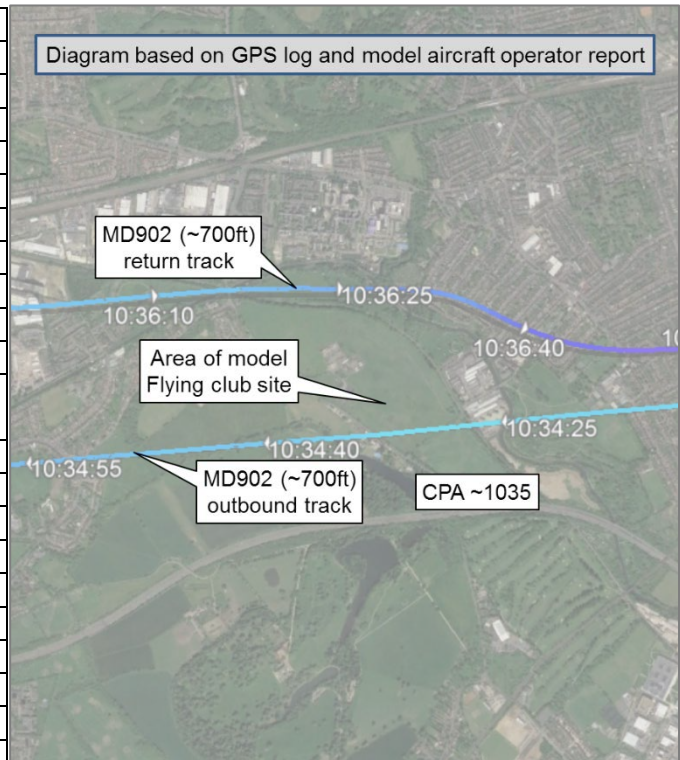


**AIRPROX REPORT No 2018152**

Date: 30 Jun 2018 Time: 1035Z Position: 5130N 00021W Location: Osterley Park

**PART A: SUMMARY OF INFORMATION REPORTED TO UKAB**

Recorded	Aircraft 1	Aircraft 2
Aircraft	Model aircraft	MD902
Operator	Civ UAS	HEMS
Airspace	London CTR	London CTR
Class	D	D
Rules	VFR	VFR
Service	None	Radar Control
Provider	N/A	Heathrow Radar
Altitude/FL	NK	750ft
Transponder	N/A	A, C, S
Reported		
Colours	Fluorescent orange, white	Red, green, yellow
Lighting	None	Strobes, landing
Conditions	VMC	VMC
Visibility	'Good'	>10km
Altitude/FL	300ft	800ft
Altimeter	agl	QNH (1016hPa)
Heading	NK	080°
Speed	NK	125kt
ACAS/TAS	Not fitted	Not fitted
Separation		
Reported	NK	600ft V/0m H
Recorded	NK	



**THE MODEL AIRCRAFT OPERATOR** reports flying his model aircraft, facing approximately northwest with the wind from the southwest. He heard the unmistakable sound of a helicopter approaching from behind, glanced around and realised that the HEMS air ambulance was approaching from the east at not more than 500ft agl, possibly much lower. He immediately put the model aircraft into a near vertical dive and levelled out at about 30ft [agl] before the helicopter reached his position. He maintained altitude until the helicopter had passed, being prepared to land if necessary. The operator noted that the model flying club has been operating from the site regularly since 1997 and that as part of their 'planning permission' are required to contact ATC at Heathrow for their permission<sup>1</sup>. The operator was flying at about 300ft and stated that all models operated at the site were less than 7kg in mass. The operator also stated that the wind noise had masked the noise of the approaching helicopter until it was very close, that they often saw the air ambulance in the vicinity, and that on this occasion it was much lower and closer 'than normal'.

He assessed the risk of collision as 'Low'.

**THE MD902 PILOT** reports that while returning to his point of departure from near the Airport Spur VRP, due to task cancelation, he saw a model-flying site beneath the aircraft and one model aircraft in the circuit. He judged the model aircraft to be a good distance below and was not a threat. He continued on track to his point of departure.

He assessed the risk of collision as 'None'.

<sup>1</sup> The required permission was obtained in October 1997 as a blanket permission to operate at the stated location below 400ft agl. Heathrow did not require notification every time the site was active.

## Factual Background

The weather at Heathrow was recorded as follows:

```
METAR COR EGLL 301050Z AUTO 07008KT 040V120 9999 NCD 24/10 Q1016 NOSIG=
METAR COR EGLL 301020Z AUTO 05006KT 360V090 9999 NCD 22/10 Q1016 NOSIG=
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## Analysis and Investigation

### UKAB Secretariat

The model aircraft operator was an entitled user of the airspace and was required to ensure that his model aircraft did not endanger other aircraft, as was the MD902 pilot.

## Summary

An Airprox was reported when a model aircraft and an MD902 flew into proximity at 1035hrs on Saturday 30<sup>th</sup> June 2018. The MD902 pilot was operating under VFR in VMC in receipt of a Radar Control Service from Heathrow Radar.

## **PART B: SUMMARY OF THE BOARD'S DISCUSSIONS**

Information available consisted of reports from the model aircraft operator and the MD902 pilot, radar photographs/video recordings and the MD902 GPS track log.

Members first discussed the model aircraft operator's perception of the incident in light of the information from the MD902's GPS track log. The helicopter had first transited east-to-west across the model aircraft flying area at an altitude of 750ft, about 700ft agl. Members felt that this was a normal occurrence and noted that the model aircraft operator had reported the wind noise masking 'the noise of the approaching helicopter until it was very close'. Members agreed that this had likely played a large part in the model aircraft operator's perception of events, in that a likely 'startle response' had resulted in an assessment of separation that was much less than was actually the case. In the event, the MD902 pilot reported seeing the model-flying-club site as he returned to his departure point, this time transiting west-to-east and also at a height of about 700ft agl.

It was apparent that the MD902 pilot had not seen the model aircraft during his earlier westbound transit when the model aircraft operator had experienced the Airprox; however, Board members felt that normal procedures, safety standards and parameters had nonetheless pertained, even though the model aircraft operator had been concerned by the proximity of the MD902. Some members wondered whether the Heathrow controller could have notified the MD902 pilot of the model flying site's activity, given that the model flying site users had notified Heathrow of the site's location. It was agreed that this would be a useful addition to low-level VFR helicopter traffic situational awareness but was constrained by controller workload and R/T congestion, and was mitigated in any case by the requirements for model flying to be undertaken below 400ft and for aircraft to observe the 500ft rule.

## **PART C: ASSESSMENT OF CAUSE AND RISK**

Cause: The model aircraft operator was concerned by the proximity of the MD902.

Degree of Risk: E.

## Safety Barrier Assessment<sup>2</sup>

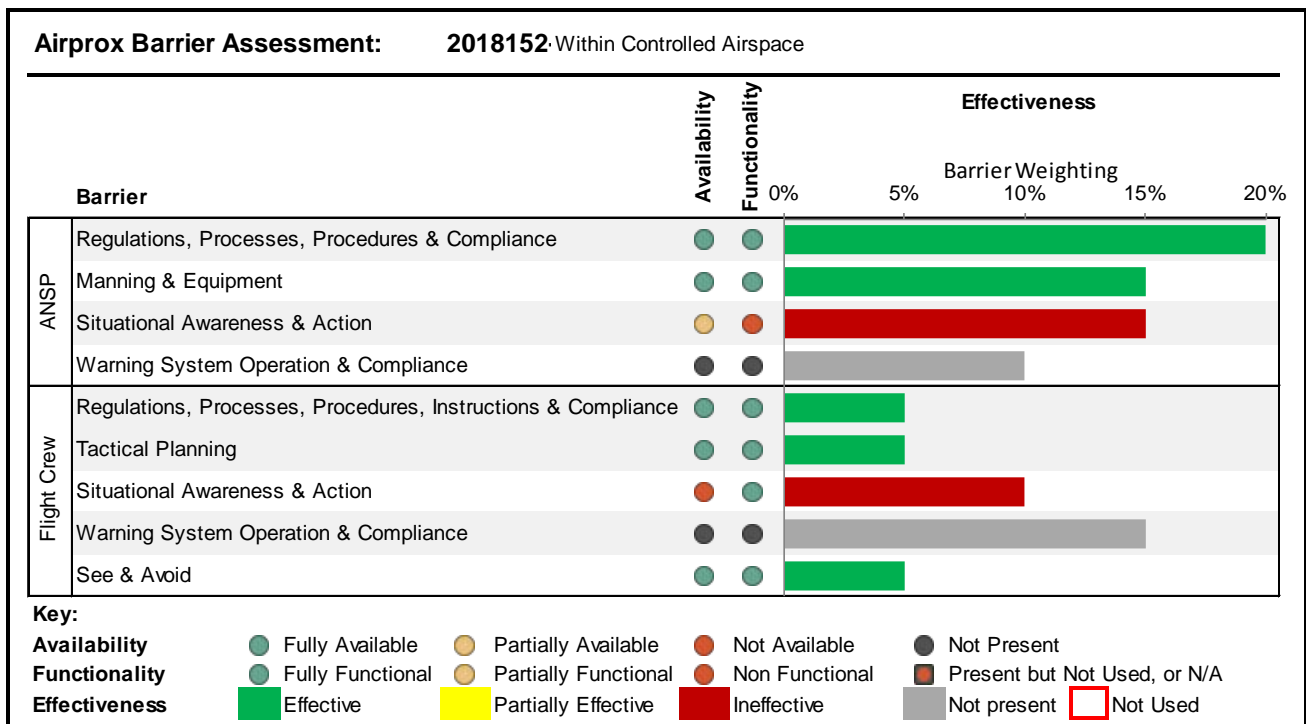
In assessing the effectiveness of the safety barriers associated with this incident, the Board concluded that the key factors had been that:

### ANSP:

**Situational Awareness and Action** were assessed as **ineffective** because although the Heathrow Radar controller might have known the location of the model flying site, he could not detect the model itself.

### Flight Crew:

**Situational Awareness and Action** were assessed as **ineffective** because the MD902 pilot was not aware of the model flying activity until he saw the model.



<sup>2</sup> The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).