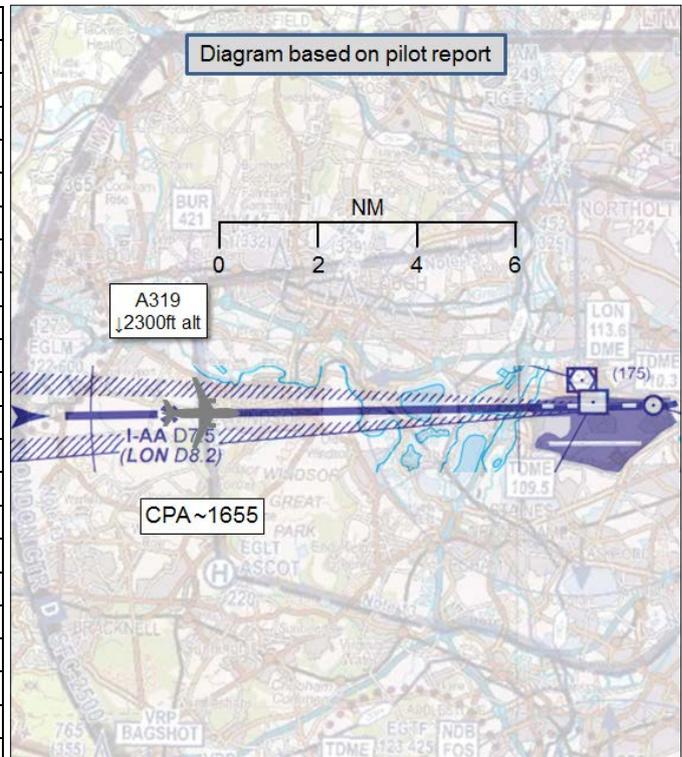


**AIRPROX REPORT No 2016073**

Date: 08 May 2016 Time: 1655Z Position: 5129N 00040W Location: 7nm W Heathrow

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

Recorded	Aircraft 1	Aircraft 2
Aircraft	A319	Drone
Operator	CAT	Unknown
Airspace	Heathrow CTR	Heathrow CTR
Class	D	D
Rules	IFR	
Service	Aerodrome	
Provider	Heathrow	
Altitude/FL	~2300ft	
Transponder	A, C, S	
<b>Reported</b>		Not reported
Colours	Company	
Lighting	'All on'	
Conditions	VMC	
Visibility	30km	
Altitude/FL	2300ft	
Altimeter	QNH (1015hPa)	
Heading	091°	
Speed	170kt	
ACAS/TAS	TCAS II	
Alert	None	
<b>Separation</b>		
Reported	200ft V/100m H	NK
Recorded	NK	



**THE A319 PILOT** reports being at 7DME final for RW09L at Heathrow when he saw a yellow object in his left 11 o'clock, which passed down the left side of the aircraft. He thought it may have been a drone, but did not report the sighting to ATC because he also felt it might have been a child's helium balloon. After arrival at the stand, a disembarking passenger reported to the First Officer that they had positively identified a drone passing close to the aircraft. An Airprox report was therefore subsequently filed.

He assessed the risk of collision as 'Medium'.

**THE DRONE OPERATOR:** The drone operator could not be traced.

**THE HEATHROW TOWER CONTROLLER** reports that he was made aware of the Airprox incident after the event and that he was therefore unable to pass Traffic Information to subsequent aircraft at the time.

**Factual Background**

The weather at Heathrow was recorded as follows:

METAR COR EGLL 081720Z AUTO 12015KT 9999 NCD 25/05 Q1006 NOSIG=  
 METAR COR EGLL 081650Z AUTO 13013KT 9999 NCD 25/05 Q1006 NOSIG=  
 METAR COR EGLL 081620Z AUTO 13012G22KT 100V160 9999 NCD 26/05 Q1006 NOSIG=

## Analysis and Investigation

### UKAB Secretariat

The Air Navigation Order 2009 (as amended), Article 138<sup>1</sup> states:

‘A person must not recklessly or negligently cause or permit an aircraft to endanger any person or property.’

Article 166, paragraphs 2, 3 and 4 state:

‘(2) The person in charge of a small unmanned aircraft may only fly the aircraft if reasonably satisfied that the flight can safely be made.

(3) The person in charge of a small unmanned aircraft must maintain direct, unaided visual contact with the aircraft sufficient to monitor its flight path in relation to other aircraft, persons, vehicles, vessels and structures for the purpose of avoiding collisions.’

(4) The person in charge of a small unmanned aircraft which has a mass of more than 7kg excluding its fuel but including any articles or equipment installed in or attached to the aircraft at the commencement of its flight, must not fly the aircraft

(a) in Class A, C, D or E airspace unless the permission of the appropriate air traffic control unit has been obtained;

(b) within an aerodrome traffic zone ...; or

(c) at a height of more than 400 feet above the surface unless it is flying in airspace described in sub-paragraph (a) or (b) and in accordance with the requirements for that airspace.’

A CAA web site<sup>2</sup> provides information and guidance associated with the operation of Unmanned Aircraft Systems (UASs) and Unmanned Aerial Vehicles (UAVs).

Additionally, the CAA has published a UAV Safety Notice<sup>3</sup> which states the responsibilities for flying unmanned aircraft. This includes:

‘You are responsible for avoiding collisions with other people or objects - including aircraft.

Do not fly your unmanned aircraft in any way that could endanger people or property.

It is illegal to fly your unmanned aircraft over a congested area (streets, towns and cities).

..., stay well clear of airports and airfields’.

## Summary

An Airprox was reported when an A319 and a drone flew into proximity at about 1655 on Sunday 8<sup>th</sup> May 2016. The A319 pilot was operating under IFR in VMC in receipt of an Aerodrome Control Service from Heathrow Tower. The drone operator could not be traced.

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

Information available consisted of a report from the A319 pilot, a report from the Tower controller and radar photographs/video recordings.

The Board first noted that, as for other aviators, drone operators are fundamentally required to avoid collisions with all other aircraft. More specifically, drone flight above 400ft is prohibited in Class D airspace without the permission of the appropriate air traffic control unit. Members quickly agreed that, at 2300ft, the drone was being operated within the Class D airspace of the Heathrow CTR that it should not have been flying there and that, in his non-compliance, the drone operator had flown the drone into conflict with the A319, on final approach to Heathrow Airport. Noting the difficulty in accurately assessing range in these circumstances, but also aware that the object had been close

<sup>1</sup> Article 253 of the ANO details which Articles apply to small unmanned aircraft. Article 255 defines ‘small unmanned aircraft’. The ANO is available to view at <http://www.legislation.gov.uk>.

<sup>2</sup> [www.caa.co.uk/uas](http://www.caa.co.uk/uas)

<sup>3</sup> CAP 1202

enough for a passenger to positively identify it as a drone, the Board felt that the likely separation and relatively non-maneuvrable phase of flight of the A319 was such that the safety of the aircraft may have been compromised to the extent that safety had not been assured in this incident.

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

Cause: The drone was flown into conflict with the A319

Degree of Risk: B.