# AIRPROX REPORT No 2015190

Date: 17 Jun 2015 Time: 1857Z Position: 5133N 00010E Location: 5nm NE London/City Airport

# PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2	Diagram based on radar data
Aircraft	Cessna Citation	Drone	and pilot reports
Operator	Civ Comm	Unknown	
Airspace	London TMA	London TMA	JOSA LENKINSI
Class	А	А	Citation Citation 250
Rules	IFR		CHIGWELL Row 242
Service	Radar Control		J45 Havening 3
Provider	Thames Radar		Grange Hill
Altitude/FL	3000ft		1856:34 A40 * 2
Transponder	A, C, S		
Reported		Not reported	Gidea
Colours	White/red/grey/		56:46 A39 * NM
	black		15002-25002
Lighting	NK		56:58 A37
Conditions	VMC		30.30 A37
Visibility	20km		HORNCHURCH
Altitude/FL	3000ft		SFC-2557:10 A33
Altimeter	NK		Green LUN
Heading	180°		A30 + CPA ~1857:22
Speed	200kt		UVDD Decomber
ACAS/TAS	TCAS II		GERPINS
Alert	None		Fm Fm
Separation			
Reported	50ft V/100m H		
Recorded NK			

**THE CITATION PILOT** reports breaking cloud on the initial approach to Biggin Hill when they came within 100m of a small black 'quadcopter' drone. No avoiding action was possible because the drone was seen as they passed it.

He assessed the risk of collision as 'Medium'.

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

### **Factual Background**

The weather at Biggin Hill was recorded as follows:

METAR EGKB 171850Z 26010KT 9999 SCT025 20/14 Q1020=

# 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.'

<sup>&</sup>lt;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 <a href="http://www.legislation.gov.uk">http://www.legislation.gov.uk</a>.

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 a Cessna Citation and a drone flew into proximity at about 1857 on Wednesday 17<sup>th</sup> June 2015. The Citation pilot was operating under IFR in VMC, in receipt of a Radar Control Service from Thames Radar. The drone operator could not be traced.

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

Information available consisted of a report from the Citation pilot and radar video recordings.

It was apparent that the Citation pilot had passed close enough to the drone to identify it in some detail and, from his reported altitude, that the drone should not have been operated in that vicinity. Because it should not have been flown in that airspace, it was agreed that the cause of the Airprox was that the drone had been flown into conflict with the Citation. Unfortunately, tracing action on the drone operator was unsuccessful.

The drone reportedly passed some 100m from the Citation; consequently, it was agreed that safety margins had been much reduced.

### PART C: ASSESSMENT OF CAUSE AND RISK

Cause:

The drone was flown into conflict with the Citation.

Degree of Risk: B.

<sup>&</sup>lt;sup>2</sup> www.caa.co.uk/uas

<sup>&</sup>lt;sup>3</sup> CAP 1202