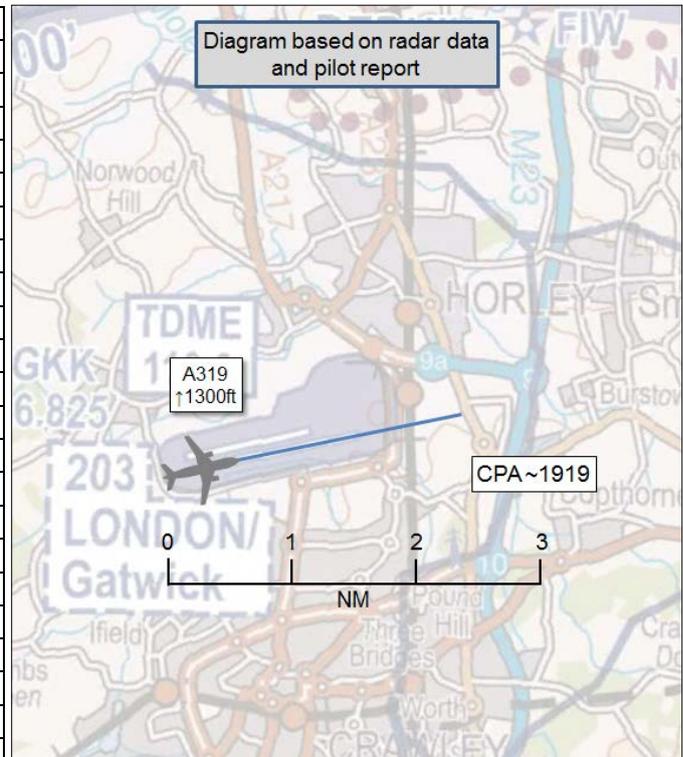


AIRPROX REPORT No 2016104

Date: 17 Jun 2016 Time: 1919Z Position: 5109N 00008W Location: 1nm E Gatwick

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	A319	Unknown
Operator	CAT	Unknown
Airspace	Gatwick CTR	Gatwick CTR
Class	D	D
Rules	IFR	
Service	Aerodrome	
Provider	Gatwick Tower	
Altitude/FL	1300ft	
Transponder	A, C, S	
Reported		Not reported
Colours	Company	
Lighting	All on	
Conditions	VMC	
Visibility	>10km	
Altitude/FL	1300ft	
Altimeter	NK	
Heading	080°	
Speed	150kt	
ACAS/TAS	TCAS II	
Alert	None	
Separation		
Reported	0ft V/ 0m H	
Recorded		NK



THE A319 PILOT reports in the initial climb departing Gatwick from RW08R at dusk, when he saw a drone pass very close down the left side and slightly above his aircraft. He estimated it was 50-100cm in size, a flattened ball in shape and dark in colour. There was insufficient time to react as the object was small and only seen at the last minute. He reported the occurrence to ATC.

He assessed the risk of collision as 'Medium'.

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

THE GATWICK CONTROLLER did not file a report with UKAB.

Factual Background

The weather at Gatwick was recorded as follows:

METAR EGKK 171920Z VRB02KT 9999 FEW012 FEW030CB 15/14 Q1012=

Analysis and Investigation

UKAB Secretariat

The Air Navigation Order 2009 (as amended), Article 138¹ states:

¹ 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>.

'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 site² 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 Notice³ 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 an object flew into proximity at about 1919 on Friday 17th June 2016. The A319 pilot was operating under IFR in VMC in receipt of an Aerodrome Control Service from Gatwick Tower.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

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

There are no specific ANO regulations limiting the operation of drones in controlled airspace if they weigh 7kg or less other than if flown using FPV (with a maximum weight of 3.5kg) when they must not be flown in Class A, C, D or E, or in an ATZ during notified hours, without ATC permission. Drones weighing between 7kg and 20kg must not be flown in Class A, C, D or E, or in an ATZ during notified hours, without ATC permission. CAP722 gives guidance that operators of drones of any weight must avoid and give way to manned aircraft at all times in controlled Airspace or ATZ. CAP722 gives further guidance that, in practical terms, drones of any mass could present a particular hazard when operating near an aerodrome or other landing site due to the presence of manned aircraft taking off and landing. Therefore, it strongly recommends that contact with the relevant ATS unit is made prior to conducting such a flight.

Notwithstanding the above, all drone operators are also required to observe ANO 2016 Article 94(2) which requires that the person in charge of a small unmanned aircraft may only fly the aircraft if reasonably satisfied that the flight can safely be made, and the ANO 2016 Article 241 requirement not

² www.caa.co.uk/uas

³ CAP 1202

to recklessly or negligently cause or permit an aircraft to endanger any person or property. Allowing that the term 'endanger' might be open to interpretation, drones of any size that are operated in close proximity to airfield approach, pattern of traffic or departure lanes, or above 1000ft agl (i.e. beyond VLOS (visual line of sight) and FPV (first-person-view) heights), can be considered to have endangered any aircraft that come into proximity. In such circumstances, or if other specific regulations have not been complied with as appropriate above, the drone operator will be judged to have caused the Airprox by having flown their drone into conflict with the aircraft.

Although the A319 pilot reported the object as a drone, members thought that his description of the object was more akin to that of a balloon and agreed that there may be some doubt as to whether the object was a drone or a balloon. If it was a drone, then the operator had patently not ensured that the flight could be made safely. Nevertheless, it was apparent that the object had passed close by and that collision had been avoided by providence alone.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A conflict in the Gatwick CTR

Degree of Risk: A.