AIRPROX REPORT No 2015118

Date: 26 Jul 2015 Time: 1735Z Position: 5059N 00120W Location: Southampton CTR (Sunday)

Recorded	Aircraft 1	Aircraft 2		
Aircraft	DHC8	Drone		Diagram based on radar data
Operator	CAT	Unknown	and the states	a Ballet Ort
Airspace	Southampton CTR	Southampton CTR	A CONTRACT	SAT SULLA
Class	D	D	- Here	
Rules	IFR			DHC
Service	Radar Control		and the	
Provider	Solent APR		5 A 15 1	
Altitude/FL	700ft		- 2	DOVER A STA
Transponder	A, C, S		C. 14	★ 1734:06 A12
Reported			NM	34:18 A10
Colours	NK		- 1	🗚 34:30 A09
Lighting	NK			* 34:42 A08
Conditions	VMC			* A07
Visibility	>10km		Carl Barris	AUT.
Altitude/FL	700ft		—	
Altimeter	NK		and the second second	CPA ~1734:54
Heading	205°		1	
Speed	140kt		15/12	
ACAS/TAS	TCAS II		SUPERIO -	Southampton Airport
Alert	None			Countampton Airport
	Separation			Martin Martin Martin Martin
Reported	0ft V/350m H	NK		
Recorded	1	NK		

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE DHC8 PILOT reports that, on contacting Solent Approach, they were informed that a previous aircraft had reported seeing a drone in the vicinity of the aerodrome. On final approach, the crew saw a drone in their right 3 o'clock at a range of about 350m.

The pilot did not make an assessment of the risk of collision.

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

THE SOLENT APPROACH CONTROLLER reports that, following an earlier Airprox with a drone north of the airport (2015117), the DHC8 pilot was made aware of the circumstances of the incident and the fact that a search had been conducted for the drone with nothing found. When on 2nm final, the DHC8 pilot reported contact with a drone at the same level and, when questioned, stated that he wished to file an Airprox. Hampshire police were informed, and the controller noted that the drone was not visible from the Tower.

Factual Background

The weather at Southampton was recorded as follows:

METAR EGHI 261720Z 23012G23KT 200V260 9999 FEW010 SCT015 17/13 Q0998=

Analysis and Investigation

CAA ATSI

Radar replay confirmed no other contacts visible in the area.

UKAB Secretariat

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

Also, stay well clear of airports and airfields'.

Summary

An Airprox was reported when a DHC8 and a drone flew into proximity at about 1735 on Sunday 26th July 2015. The DHC8 pilots was operating under IFR in VMC, in receipt of an Aerodrome Control Service from Southampton Tower; the drone operator could not be traced.

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.

² www.caa.co.uk/uas

³ CAP 1202

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of a report from the DHC8 pilot, radar photographs/video recordings, a report from the air traffic controller involved and a report from the appropriate ATC authority.

Members considered the circumstances of the incident and noted that, for flights within Line-of-Sight, CAA guidance⁴ is that the operator is required to employ the See-and-Avoid principle through continued observation of the drone, and the airspace around it, with respect to other aircraft and objects. Within the UK, Visual Line-of-Sight operations are normally accepted out to a maximum distance of 500m horizontally, and 400ft vertically, from the drone operator.

In this incident, reported at 700ft, members opined that the drone operator was probably flying on First Person View (FPV), for which regulation mandates that an additional person must be used as a competent observer who must maintain direct unaided visual contact with the drone in order to monitor its flight path in relation to other aircraft. The drone was within the Southampton CTR Class D airspace above 400ft and without permission; as a result of his non-compliance with CAA regulations, the Board considered that the drone was flown into conflict with the DHC8. Nevertheless, the Board noted that the DHC8 pilot reported a separation of 350m, and so they considered that there was no risk of collision.

PART C: ASSESSMENT OF CAUSE AND RISK

<u>Cause</u>: The drone was flown into conflict with the DHC8.

Degree of Risk: C.

⁴ <u>http://www.caa.co.uk/default.aspx?catid=1995&pagetype=90&pageid=11186</u>