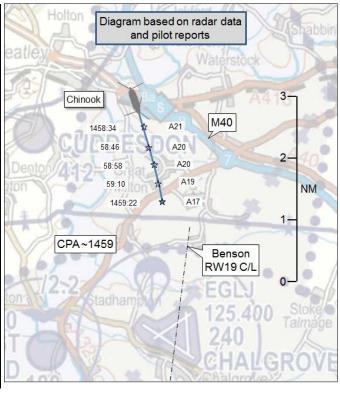
AIRPROX REPORT No 2016163

Date: 8 Aug 2016 Time: 1459Z Position: 5144N 00104W Location: 7nm north Benson

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Chinook	Drone
Operator	HQ JHC	Unknown
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	
Service	Traffic	
Provider	Benson App	
Altitude/FL	1700ft	
Transponder	A, C, S	
Reported		Not reported
Colours	Green	
Lighting	Strobes, nav	
Conditions	VMC	
Visibility	>10km	
Altitude/FL	1700ft	
Altimeter	QFE (1017hPa)	
Heading	189°	
Speed	100kt	
ACAS/TAS	Not fitted	
	Separation	
Reported	0ft V/150m H	
Recorded	NK	



THE CHINOOK PILOT reports that, during an SRA, the No2 crewman reported sighting a drone passing down the right-hand side of the aircraft at about 100-200m range. It was described as bigger than a football and dark in colour in a possible hover profile. The crew continued the approach and ATC were informed.

He assessed the risk of collision as 'Medium'.

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

THE APPROACH CONTROLLER reports that on completion of general handling to the west of Benson, the Chinook pilot carried out an SRA. On subsequently climbing out for an ILS, he reported that between junctions 7 and 8 [on the M40 he reported afterwards] he had seen a UAV the size of a football fly down his left hand side at 1700ft. Traffic had been called at approximately 7.5 miles north of Benson but had faded from radar before an inbound turn was given. Before taking the aircraft the Talkdown controller asked to check whether anything was painting at 7.5 miles because there was again an intermittent contact showing on the PAR console. On checking the screen, the only contact showing was the Chinook.

THE TALKDOWN CONTROLLER AND SUPERVISOR reports the Chinook had just completed an SRA when the pilot mentioned to the Approach controller that he had seen a UAV 'in the vicinity of Junction 7 and 8'. At the time neither controller was sure where this was. After the Chinook had landed the pilot called the tower to discuss the incident with the Approach controller. He confirmed that Junctions 7 and 8 referred to junctions on the M40, which would indicate that he was conducting or commencing his SRA at the time of the Airprox. This provided some clarification and the controller did recall having called traffic early on in the approach on a faint contact at about 6 to 7 miles on final.

Factual Background

The weather at Benson was recorded as follows:

METAR EGUB 081450Z 26010KT CAVOK 21/07 Q1021 BLU NOSIG=

Analysis and Investigation

UKAB Secretariat

There are no specific ANO regulations limiting the maximum height for the operation of drones that weigh 7kg or less other than if flown using FPV (with a maximum weight of 3.5kg) when 1000ft is the maximum height. Drones weighing between 7kg and 20kg are limited to 400ft unless in accordance with airspace requirements. Notwithstanding, there remains a requirement to 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. CAP 722 gives guidance that, within the UK, visual line of sight (VLOS) operations are normally accepted to mean a maximum distance of 500m [1640ft] horizontally and 400ft [122m] vertically from the Remote Pilot.

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 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.

A joint CAA/NATS web site¹ provides information and guidance associated with the operation of Unmanned Aircraft Systems (UASs) and Unmanned Aerial Vehicles (UAVs) and CAP722 (UAS Operations in UK Airspace) provides comprehensive guidance.

Comments

JHC

Again, this is another example of drones operating in the vicinity of manned aircraft without prior warning or due regard for other air users. Unfortunately, until there is a better understanding by the private drone operating community of the potential risk they pose to manned aircraft, this event will reoccur. Crews must remain vigilant and use the only tool at present that will make them aware of other privately owned unmanned airborne objects – LOOKOUT.

It is hoped that the Drone Safe website will help to educate the public. Alongside it, JHC are endeavouring to educate their own local communities with new pamphlets that contain the local airspace so to make the potential drone pilots aware of the likely locations of our operating aircraft. Also, The MAA in conjunction with BALPA and the Department for Transport are currently concluding a trial regarding the risk posed by drone impact, which should be reported on in January 2017 and provide good evidence to back a review of what is currently being undertaken to mitigate the collision risk.

¹ dronesafe.uk

Summary

An Airprox was reported when a Chinook and a drone flew into proximity at about 1459 on Monday 8th August 2016. The Chinook pilot was operating under VFR in VMC in receipt of a Traffic Service from Benson Approach. The drone operator could not be traced.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of a report from the Chinook pilot, radar photographs/video recordings and reports from the air traffic controllers involved.

Members agreed that the drone had been operated at an altitude above that allowed by regulation by probably not being in direct unaided line of sight and, if using FPV, above 1000ft. It was therefore agreed that the drone had been flown into conflict with the Chinook. Notwithstanding the difficulty of range assessment without visual cues, it was also agreed that the drone had passed sufficiently clear that there was no risk of collision on this occasion. Members noted that neither pilot had seen the drone, and that the crewman had seen it at about CPA.

PART C: ASSESSMENT OF CAUSE AND RISK

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

Degree of Risk: C.