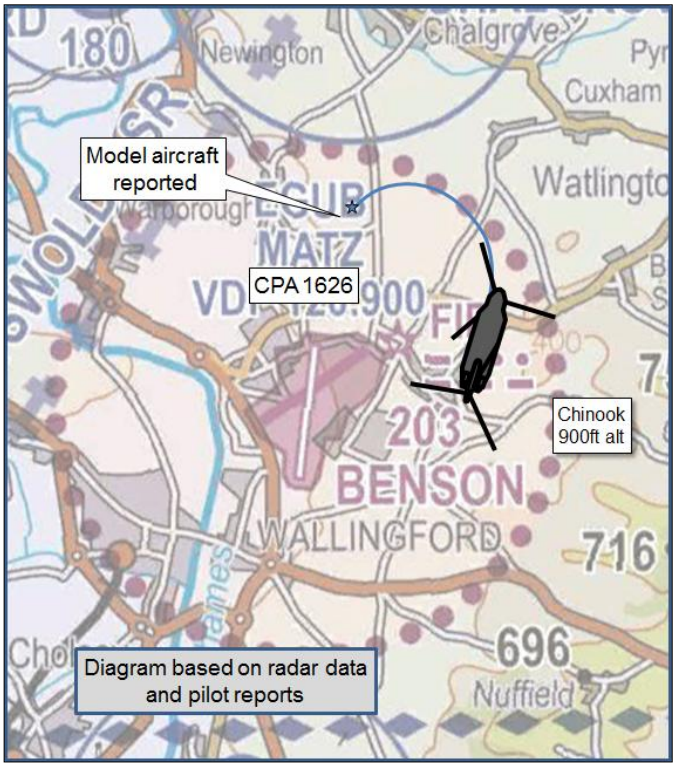
AIRPROX REPORT No 2016113

Date: 21 Jun 2016 Time: 1626Z Position: 5138N 00105W Location: RAF Benson

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Chinook	Model Glider
Operator	HQ JHC	Unknown
Airspace	Benson ATZ	
Class	G	G
Rules	VFR	
Service	Aerodrome	
Provider	Benson	
Altitude/FL	1200ft	
Transponder	A, C, S	
Reported		
Colours	Green	White/Orange
Lighting	NK	
Conditions	VMC	
Visibility	>10Km	
Altitude/FL	900ft	
Altimeter	QFE (1017hPa)	
Heading	NK	
Speed	80kt	
ACAS/TAS	Unknown	
Separation		
Reported	0ft V/50-100m H	
Recorded	NK	



THE CHINOOK PILOT reports that he was on base for RW19 at approximately 900ft when he saw a model aircraft within 50-100m of his aircraft, at the same level and manoeuvring erratically. It was a white glider-style model with a dihedral wing and some orange markings. He took avoiding action, informed ATC and they offered an alternative join via Point West.

He assessed the risk of collision as 'High'.

The Model Glider operator could not be traced.

THE BENSON ADC reports the Chinook pilot reported a model aircraft in the approach lane and approximately 3nm to the north of RW19. He offered that the pilot make an approach via Point West, which the pilot elected to do. He informed the Supervisor, who confirmed that they had not had any notification of any model flying in the area.

Factual Background

The weather at Benson was recorded as follows:

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METAR EGUB 211550Z 22010KT 9999 FEW030 BKN042 19/11 Q1017 BLU NOSIG=
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Analysis and Investigation

Military ATM

The RT transcript has no relevant transmissions; only showing the point at which the Chinook reports the Airprox with the model aircraft. The radar replay shows no contacts in the location at the time of the incident. The pilot's report indicates a white glider style model aircraft being flown

erratically on base for RW19 at approximately 900ft QFE. The controllers report indicates no awareness of model aircraft activity in the area. The controller would have been unable to pass Traffic Information on the model aircraft as they were unaware of anything showing on radar and had not been made aware of any activity from other sources. A model aircraft at that distance would be extremely difficult to see from the visual control room. The unit investigation indicates that a previous incident had occurred with a local model aircraft flying club; however, the duty operations controller had not been notified of any activity on this day. The field owner was contacted and informed operations that there had been no flying from the field; however, members do not have to book before flying. Subsequently, the field owner has requested a meeting with representatives of RAF Benson to discuss model flying club operations.

UKAB Secretariat

The Air Navigation Order 2009 (as amended), Article 138[1] 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.

Comments

JHC

This Airprox continues to provide evidence that there is a growing threat from Model Aircraft and Drones, particularly close to operating airfields. It is incumbent on all crews to maintain a high degree of vigilance and lookout when flying not just at low levels but throughout the complete flight envelope; demonstrated by the Chinook crew. However, with further education and engagement with the parties who wish to fly any scale/shape of model air system; the importance of Air Safety for all can spread.

Summary

An Airprox was reported when a Chinook and a model glider flew into proximity at 1626 on Tuesday 21st June 2016. The Chinook pilot was operating under VFR in VMC, and in receipt of an Aerodrome Service from Benson. The model glider operator could not be traced, although the model flying club was.

[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.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of a report from the Chinook pilot, transcripts of the relevant RT frequencies, radar photographs/video recordings, reports from the air traffic controllers involved and reports from the appropriate ATC and operating authorities.

There are no specific ANO regulations limiting the maximum height for the operation of unmanned air systems (UAS) that weigh 7kg or less other than if flown using FPV (with a maximum weight of 3.5kg) when 1000ft is the maximum height. UAS 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.

Neither are there any specific ANO regulations limiting the operation of UAS 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. UAS 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 UAS 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, UAS 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.

The Board noted that the model flying club was known to RAF Benson and, although situated within the Benson ATZ, is entitled to operate there. However, situated as it is in the approach lane, it would be considered good airmanship to notify Benson of any activity, and in particular flying at heights of 900ft. Noting that in this case the club weren't operating, but it was possibly just a member flying alone, the Board were heartened to hear that communication between Benson and the model flying club had taken place and hoped that this would resolve any future issues. Turning to the cause, the Board quickly agreed that in the absence of any information from the model aircraft operator this incident was best described as a conflict in the Benson ATZ. Acknowledging the difficulties in judging separation visually without external references, the Board considered that the pilot's estimate of separation, allied to his overall account of the incident, portrayed a situation where safety had been much reduced below the norm; they therefore determined the risk to be Category B.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A conflict in the Benson ATZ.

Degree of Risk: B.