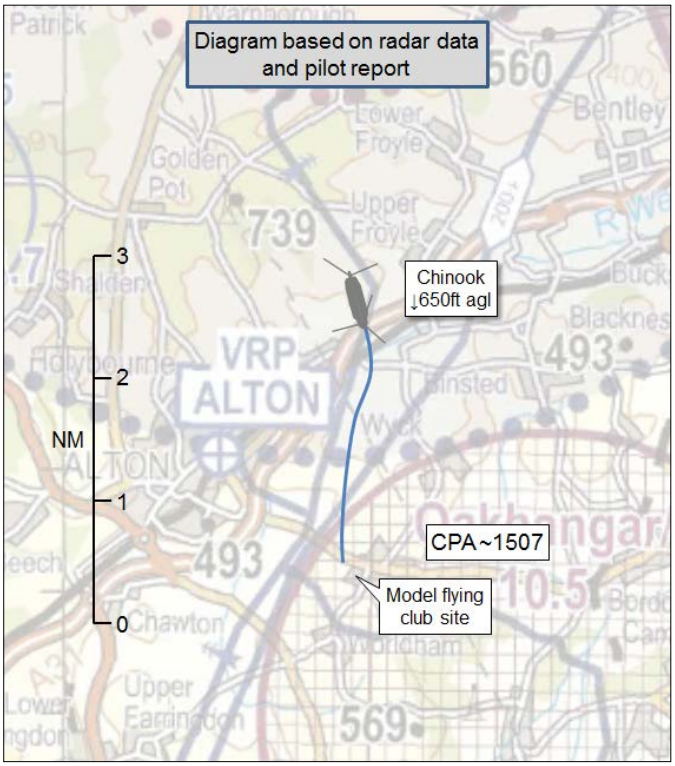
AIRPROX REPORT No 2016154

Date: 26 Jul 2016 Time: 1045Z Position: 5108N 00056W Location: 1.6nm ESE Alton

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Chinook	Model Aircraft
Operator	HQ JHC	Unknown
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	
Service	Basic	
Provider	Odiham App	
Altitude/FL		
Transponder	A, C, S	
Reported		Not reported
Colours	Green	
Lighting	All on	
Conditions	VMC	
Visibility	30km	
Altitude/FL	650ft	
Altimeter	agl	
Heading	190°	
Speed	120kt	
ACAS/TAS	Not fitted	
Separation		
Reported	0ft V/100-150m H	
Recorded	NK	



THE CHINOOK PILOT reports that he was departing the Odiham MATZ on a southerly heading, whereupon he descended to 650ft agl. Shortly after making radio contact with Odiham Approach, the aircraft captain, in the left seat, called an aircraft in the 12 o'clock position at an estimated range of 2 miles and at a similar level. This was quickly updated when it was realised that it was a large white-and-red model aircraft at a range of 400-500m, which passed about 100-150m down the left-hand side of the Chinook at the same height. The model aircraft was sufficiently large that it was mistaken for a real aircraft and would have done significant damage if there had been a collision. Once it became apparent that the model aircraft would remain clear, the 'ground party' were identified, with 3-4 vehicles and at least 2 more large model aircraft. The incident was reported to Odiham Approach for promulgation on Station.

He assessed the risk of collision as 'Medium'.

THE MODEL AIRCRAFT OPERATOR: The model aircraft operator could not be traced.

THE APPROACH CONTROLLER reports that the Tower Controller pre-noted a Chinook to him, departing under VFR to the south. He tracked a contact on radar departing 'VFR S', believed to be the pre-noted Chinook. No other contacts were seen on Radar on the Chinook's intended route. Once the Chinook pilot made radio contact on frequency he reported a model aircraft at a similar level (650ft) in the vicinity of Alton. On receiving information on the model aircraft, the controller passed this on to the Supervisor, who then informed all the squadrons and the Tower Controller so the information could be passed to any other aircraft wanting to depart or recover to the south or operate near Alton. There were no other reports of model-flying during the remainder of the controller's shift.

THE SUPERVISOR reports that the Approach controller informed him that a Chinook pilot had reported model aircraft flying in a location about 0.5nm south of Alton, at 650ft and outside the Odiham MATZ. There was no mention of an Airprox and he took this as an information call from the

pilot. The Supervisor made sure the Tower Controller was aware so that information could be passed to any other aircraft that may be departing to the south and instructed the Approach Controller to pass the information to aircraft that may be recovering or operating in the area. He then informed the Duty Authoriser on each squadron to pass on the information so crews could be briefed before they departed. He also informed the Duty Ops Controller of the same information.

Factual Background

The weather at Odiham was recorded as follows:

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METAR EGVO 261450Z 24010KT 9999 SCT040 BKN060 20/11 Q1021 BLU NOSIG=
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Analysis and Investigation

Military ATM

The pilot reported departing the Odiham MATZ and descending to 650ft agl en-route to the south. Shortly after making contact with Odiham Approach the Left Hand Seat Captain called an aircraft in the 12 o'clock, 2 miles at a similar level. This was quickly updated when the crew realised it was a model aircraft that passed approximately 100-150m down the left hand side of the Chinook at a similar height.

The Odiham ATC controllers' reports indicate no awareness of model aircraft activity in the area until it was reported by the aircraft. Post the report of model aircraft activity in the vicinity of Alton, Odiham ATC cascaded the information to the Squadrons and Duty Ops controllers to ensure full situational awareness.

The Air Traffic Controller would have been unable to pass Traffic Information on the model aircraft as there were no responses showing on radar and he had not been made aware of any activity from other sources.

UKAB Secretariat

There are no specific ANO regulations regarding minimum separation of drones (including model aircraft) from people, vessels, vehicles or structures for drones, or model aircraft, up to 20kg that are not fitted with surveillance or data acquisition systems [i.e. without cameras] other than if flown using FPV (with a maximum weight of 3.5kg) when 50m is the minimum distance (or 30m when taking off or landing), or 150m from any congested area or open-air assembly. For all drones or model aircraft up to 20kg that are fitted with surveillance and data acquisition systems [i.e. with cameras] the minimum separation distances are 50m (or 30m [98ft] when taking off or landing) from people or objects that are 'not under the control of the person in charge' (ie. third parties), or 150m from any congested area or open-air assembly. Notwithstanding, CAP1202 advice is never to fly any drone or model aircraft within 50m of a person, vehicle or building.

Notwithstanding the above, all drone or model aircraft 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 or model aircraft 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 or model aircraft operator will be judged to have caused the Airprox by having flown their drone into conflict with the aircraft.

A CAA web site[1] 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.

Additionally, the CAA has published Drone Aware[2] 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'.

UKAB Secretariat were able to make contact with a model flying club who's flying site was in close proximity to the reported Airprox position. The club secretary confirmed that members had been flying at the site on the day of the Airprox but that none of their aircraft were in the air at the time of the Chinook passing. He opined that the model aircraft in question may have been operated by an individual in the vicinity but that the individual was not operating under the auspices of the model flying club. The club secretary noted that they had written to the RAF Odiham Station Commander to notify him of model flying operations from the present site when the club moved there.

Comments

HQ JHC

This is another prime example of the increasing threat Model Aircraft and Drone operators are having on low-flying aircraft. Without a suitable technical solution to mitigate this, it is incumbent on all sides to lookout and provide suitable separation and consideration to other air users. RAF Odiham have a very good relationship with the surrounding community and are proactively engaging with model aircraft clubs to mitigate the possibility of encroaching each other's airspace, through publicity and education. A continued education program from the CAA is required to further promote safety operation of the increasing numbers of smaller drones.

Summary

An Airprox was reported when a Chinook and a model aircraft flew into proximity at 1045 on Tuesday 26th July 2016. The Chinook pilot was operating under VFR in VMC in receipt of a Basic Service from Odiham Approach. The model aircraft 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, a report from the air traffic controller involved and reports from the appropriate ATC and operating authorities.

Members agreed that the Chinook pilot had initially assessed the model aircraft as a real aircraft at greater range and had been concerned subsequently at the proximity of the (much closer) model aircraft. The Board agreed that both the Chinook pilot and the model aircraft operator had been conducting their flights correctly but that visual acquisition of the model aircraft had been delayed by its small size. It was understood that operation within the low-flying system is designed at least in part to practice and maintain low-flying skills associated with avoiding visual detection and that this could result in erosion of mitigations against MAC for those on the ground. Some members therefore wondered whether visual acquisition of the Chinook by the model aircraft operator had been delayed by the Chinook's low altitude but others felt that its distinctive noise signature would also have served as sufficient warning of approach assuming that the model aircraft operator was able to hear the

[1] www.caa.co.uk/uas
[2] CAP 1202

helicopter. In the event, the Board noted that the Chinook pilot had seen the model aircraft at sufficient range that he could assess that it would not collide with them. Unfortunately, the model aircraft operator could not be traced and his perspective of events could not be ascertained; however, members agreed that the incident was probably best described as a simple conflict in Class G airspace where there had been no risk of collision.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A conflict in Class G.

Degree of Risk: C.