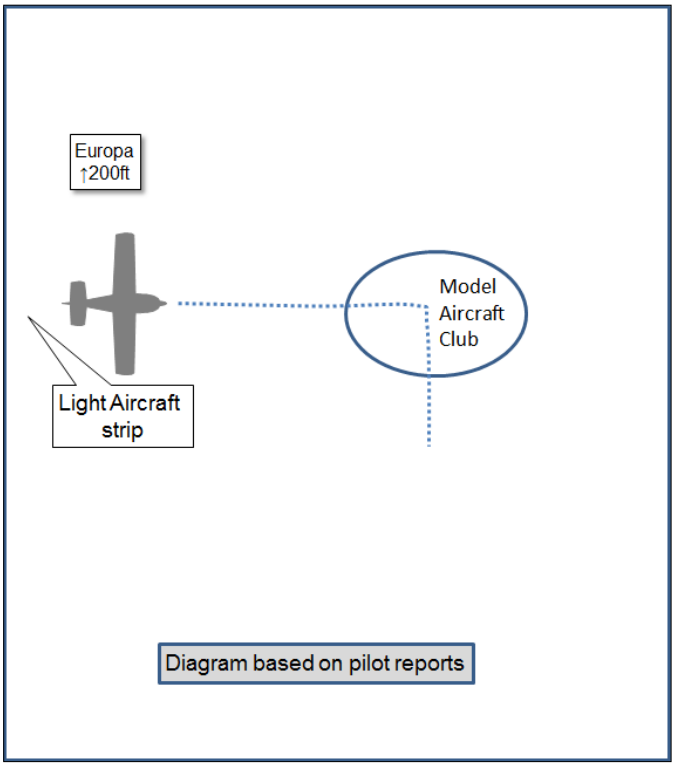
## AIRPROX REPORT No 2016046

Date: 05 Apr 2016 Time: 1505Z Position: 5138N 00121W Location: East Hanney

## PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

| Recorded | Aircraft 1 | Aircraft 2 |
|---|---|---|
| Aircraft | RC Model A/C | Europa |
| Operator | Civ Club | Civ Pte |
| Airspace | London FIR | London FIR |
| Class | G | G |
| Rules | | VFR |
| Service | | None |
| Provider | | |
| Altitude/FL | | NK |
| Transponder | | A,C,S |
| **Reported** | | |
| Colours | | White |
| Lighting | | Strobe |
| Conditions | | VMC |
| Visibility | 15km | 'Good' |
| Altitude/FL | | 200ft |
| Altimeter | | QNH |
| Heading | | 180° |
| Speed | | 75kt |
| ACAS/TAS | NA | Not fitted |
| **Separation** | | |
| Reported | 0ft V/25ft H | 20ft V/50m H |
| Recorded | | |




**THE RC MODEL AIRCRAFT OPERATOR** reports arriving at 1400 at the model aircraft club field where about 6 club members were setting up and cutting the grass in the designated flying area. The hand-held anemometer indicated a westerly wind at 8-10 kts, but the hedge causes a wind-break so the true wind speed was estimated at 15kts. At approximately 1455 they noticed a full-sized aircraft leave its hangar area and taxy towards the west; he assumed it would take off into wind on a westerly heading. At the time there were two club members flying their models. At 1505, without warning, the aircraft appeared over the western hedge/boundary, close to the hangars and about 25-30ft above the hedge. The look-out member shouted several warnings; one of the model-operators dived his aircraft but the other less experienced member turned his abruptly left away from the full-sized aircraft. However, the full-sized aircraft, now at a height of about 50ft, then turned onto south, flying over the centre of the model-flying patch. It appeared that the model and the aircraft were about the same height only 25ft apart. After about an hour, the aircraft returned, again without warning, from the east, low-level and flew a straight-in approach. A warning was shouted to the model-operators and model flying was moved to the south. The operator commented that he was experienced in mixed model/full-sized flying sites and a glider pilot himself, so felt qualified in his assessment of the events.

He assessed the risk of collision as 'High'.

**THE EUROPA PILOT** reports that he took off heading 090° rather than the usual 270° to take advantage of a slight easterly wind because the airfield was muddy. The strip is 700m long, and there is one further field before the model-field boundary. Although no models were seen to be airborne at the start of taxiing, there was a delay in take-off whilst the runway surface condition was assessed against take-off distance required. The take-off took 400m instead of the usual 250, so the turn to the south was closer to the model field than normal. The Airprox occurred in the turn; when he saw the models, he tightened his turn to avoid them.

He assessed the risk of collision as 'High'.

## Factual Background

The weather at Brize was recorded as follows:

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METAR EGVN 051450Z 30011KT CAVOK 14/M00 Q1008 BLU NOSIG=
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## Analysis and Investigation

### 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

### North Berks Radio Model Aircraft Society (NBRMAS) Chairman

The club was established in the 1960s and has been in its present location for 25 years and currently has about 120 members. The members operate with models ranging from small 2-3kg 'trainers' to larger, up to 14kg, models of WW2 scale aircraft and a few members who operate gas-turbine powered models. Such members are regularly tested and issued with a 'turbine waiver'. When the full-sized flying started from the field adjacent to the NBRMAS in 2003, procedures were agreed by the club, which included needing a look-out whenever turbine models were being flown. The look-out must be a qualified British Model flying Association (BMFA) 'B' certificate holder. The club operates a training system and solo-flying is not permitted unless a BMFA 'A' certificate holder. Over the years the club has managed to operate along-side the full-sized aircraft with very few incidents. However, despite attempts by the NBRMAS to maintain links and procedures with the pilots, their airmanship has deteriorated in recent years [in the opinion of the NBRMAS Chairman]. This incident highlights such events, to take-off and overfly the models, without warning and at only 25-30ft, could not go unreported, even if not an Airprox in the traditional sense. It was witnessed by several members.

[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.

**Summary**

An Airprox was reported when a model aircraft and an Europa flew into proximity at 1505 on Tuesday 5th April 2016. The Europa pilot was operating under VFR in VMC, not in receipt of a ATS. He saw the model aircraft when he got airborne and tightened his turn to avoid them. The model aircraft operators also took action to avoid the Europa.

## PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from the model operators and the pilot of the Europa.

The Board first looked at the actions of the model-aircraft operators; they were operating as usual in a field that had been used for many years for model-flying, with procedures in place for a look-out on behalf of those flying their models. They saw the Europa taxiing but did not expect it to over-fly them. In accordance with Article 138 of the ANO, once they realised that the Europa was going to overfly, they attempted to take the necessary avoiding action to ensure that they weren't endangering the Europa.

The Europa pilot was using a farm strip not far from the model-flying. He was perfectly entitled to take off in whichever direction he wanted to, although GA members opined that the reported wind direction and local METAR seemed to suggest that an into-wind westerly departure would have been more appropriate, particularly if the strip's surface was muddy. Noting that in his report he had commented that it took him almost twice as long to get airborne as usual, members thought that this was indicative of the surface conditions and a possible tailwind. Having taken longer than he anticipated to get airborne, the Board thought that he had probably not intended to over-fly the model-flying field at the altitude that he did, but that he was probably still accelerating to gain height and airspeed at the time. Once he realised he was directly overhead the models, the Board noted that he had attempted to take avoiding action by tightening his turn.

Notwithstanding that everyone was entitled to operate as they were, the Board couldn't help but be disappointed that more liaison had not taken place between the 2 operators. Presumably the model-club operates at reasonably predictable times and, given that mobile phones are ubiquitous, the Board couldn't understand why it was not already common practise for pilots to make a quick phone call to a designated number at the model-flying club to let them know that they were getting airborne and pass an anticipated landing time if relevant. The Board wholeheartedly encouraged both operators to conduct some coordination in order to set in place such procedures to ensure that a similar situation does not occur again with potentially more disastrous consequences.

In looking at the cause, the Board discussed at length how Article 138 of the ANO applied to this Airprox, and eventually agreed that because the model-operators had procedures in place by having look-outs to call when aircraft overflew, then they had discharged their duty in this respect. Although the Europa pilot had not intended to over-fly the model-aircraft, it appeared that the muddy field and the tailwind had both conspired to put him lower than he intended; the Board therefore agreed that he had flown into conflict with the model aircraft. The Board thought that the degree of risk was quite high, all estimates of separation were close and both parties had taken emergency avoiding action; they quickly determined that the risk was category B, safety had been much reduced below the norm.

## PART C: ASSESSMENT OF CAUSE AND RISK

Cause: The Europa pilot flew into conflict with the model aircraft.

Degree of Risk: B.