

AIRPROX REPORT No 2014187

Date/Time: 16 Sep 2014 1512Z

Position: 5120N 00029E
(1nm SW of Rochester)

Airspace: London FIR (Class: G)

Aircraft 1 **Aircraft 2**

Type: MTO Sport Gyroplane Untraced
Gyroplane Model/UAV

Operator: Civ Trg Unknown

Alt/FL: 1000ft NK
QFE (1000hPa) NK

Conditions: VMC NK

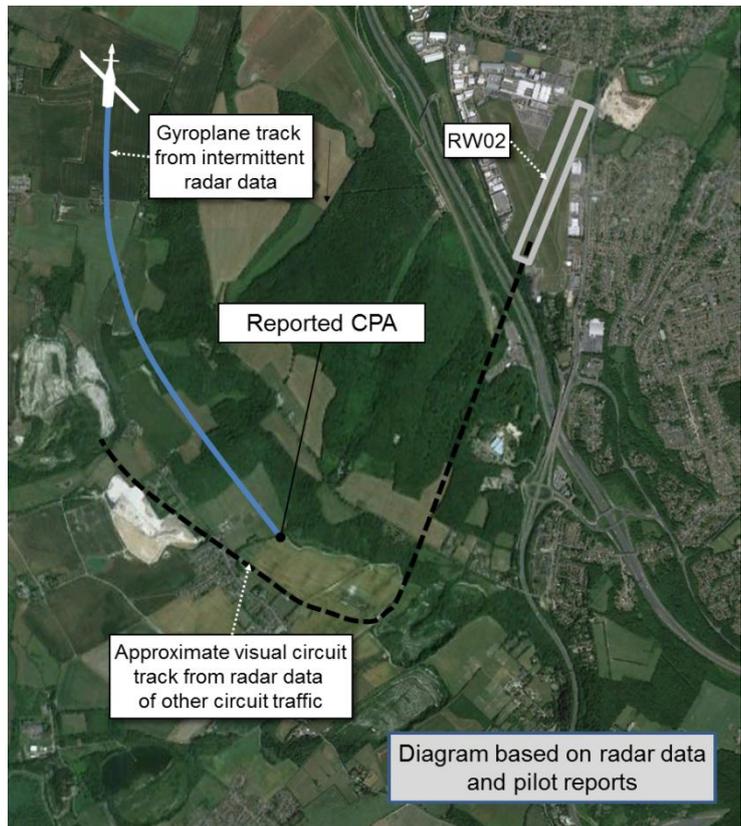
Visibility: 7nm NK

Reported Separation:

0ft V/10ft H NK V/NK H

Recorded Separation:

NK V/NK H



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE GYROPLANE PILOT reports flying with a student, with navigation, landing and strobe lights illuminated, and in communication with Rochester Information. They were operating in the visual circuit at Rochester Airport, at 1000ft (QFE 1000hPa), where a Robinson R22 helicopter was also operating. On their third circuit, the Gyroplane pilot heard the R22 pilot report that he had seen a model aircraft on the ground. As they approached final, the instructor and student both looked and saw the white delta or boomerang shaped model aircraft still in the field, it was white and stood out against the green field; they noted that it was still there on their next circuit, but that it had gone on their next circuit. Carrying out a further circuit, they positioned for final approach to RW02 at 70kt, and the model appeared at their height (1000ft) and 'came straight for' them. The instructor immediately took control, banked the aircraft sharply right, and estimated that the model came within 10ft of them. The student was quite shaken, so the instructor elected to land and reported the Airprox to ATC; he assessed that the model had a wing-span of 5-6ft.



Figure 1. an MTO Sport Gyroplane (library picture)

He assessed the risk of collision as 'High'.

THE MODEL/UAV PILOT COULD NOT BE TRACED

Factual Background

The weather at Biggin Hill at 1450 was recorded as:

METAR EGKB 161450Z 07007KT 8000 FEW030 21/14 Q1014

Analysis and Investigation

CAA ATSI

Due to a fault in the recording equipment at Rochester on 16 September 2014, the RTF recording for this incident was not available.

The Gyroplane was conducting a training exercise in the left hand circuit for RW02 at Rochester airport.

In discussion with CAA ATSI, the FISO reported that due to the position of the Hangar they had not observed the Airprox. However, the incident was reported to the Police but it was understood that the Police were unable to locate the Model aircraft pilot. The ATSU reported that there had been no similar previous incidents of this nature and this had been considered a one-off.

The Kent Police indicated that a description of the Model aircraft pilot had been obtained but that after house-to-house enquires it had not been possible to establish the identity of the person concerned. Consequently no further action had been taken.

At 1510:37 area radar recording showed the R22 on final approach for RW02 at 0.2nm, followed by the Gyroplane at a range of 0.9nm. Shortly afterwards both aircraft faded from radar. The Model aircraft does not appear on radar, and it was not possible to determine the geometry of the Gyroplane and Model aircraft as they came within close proximity.

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.’

Summary

An Airprox was reported on final approach to RW02 at Rochester between an MTO Sport Gyroplane flying in the visual circuit, and an untraced Model aircraft/UAV.

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 included reports from the pilot of the Gyroplane, transcripts of the relevant RT frequency, radar photographs/video recordings and a report from the appropriate ATC authority.

The Board noted the location of the Airprox, and that it had occurred after several visual circuits had been flown to RW02 by a more than one aircraft. Members were therefore incredulous that the operator of the model aircraft could possibly be unaware of the presence of the airport and the aircraft operating in the vicinity. The Board unanimously agreed that the cause was that the model aircraft had been flown in to proximity with the Gyroplane. Turning to the degree of risk, some members thought this was an A because the reported CPA was so close that, even allowing for the difficulty of judging separation against model aircraft, the model aircraft operator had created a very serious likelihood of collision. However the Board observed that although safety margins had undoubtedly been significantly reduced, the gyroplane pilot had just had time to take evasive action and avert a collision and so, recognising that this was still a very serious incident indeed that had very almost resulted in a collision that would likely have brought down the gyroplane, it was agreed that the Degree of Risk was Category B.

PART C: ASSESSMENT OF CAUSE AND RISK

<u>Cause:</u>	The model aircraft was flown into conflict with the gyroplane.
<u>Degree of Risk:</u>	B.
<u>ERC Score²:</u>	20.

² Although the Event Risk Classification (ERC) trial had been formally terminated for future development at the time of the Board, for data continuity and consistency purposes, Director UKAB and the UKAB Secretariat provided a shadow assessment of ERC.