

AIRPROX REPORT No 2012028

Date/Time: 1 Mar 2012 1722Z

Position: 5541N 00405W (~1nm
E of Strathaven Microlight
Site - elev 847ft)

Airspace: Scottish FIR (Class: G)

Reporting Ac Reported Ac

Type: CZAW ML R44

Operator: Civ Pte Civ Pte

Alt/FL: 400ft↓ NR
aal NR

Weather: VMC CLBC NR NR

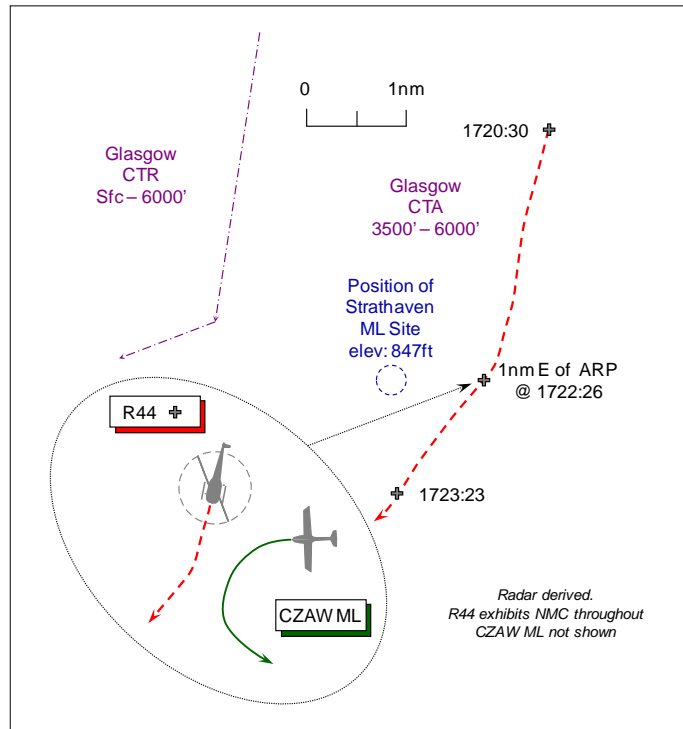
Visibility: 3-5km NR

Reported Separation:

50ft V/50m H NR

Recorded Separation:

Not recorded



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE CZAW SPORTCRUISER MICROLIGHT (CZAW ML) PILOT reports he was inbound to Strathaven ML Site as the first of three ac on a delivery flight from England and listening out on the SAFETY COM frequency of 135.475MHz.

The weather had necessitated a routeing via Kirkbride N to the W Linton area, then W to Strathaven. The weather was clear to the N and E as far as the M74 – some 5nm E of Strathaven – with a cloud base of 2000-2500ft and an inflight visibility of >20km. To the W, the visibility was 3-5km worsening towards the airfield; however, it was improving.

On final, heading 270° at 65kt about 700m E of the threshold to RW27 descending through 400ft aal – about 1250ft ALT – he spotted a helicopter heading S in his 1 o'clock about 100-150ft away crossing from R – L, 50ft above his ML. To avoid the rotor wash from the helicopter – a blue R44 – he immediately turned L where the ground is lower into a LH orbit as the helicopter passed 50m away and 50ft above his ML with a 'high' Risk of collision.

The ML has a red and white colour-scheme and the tail strobe and landing light were both on. A squawk of A7000 was selected with Modes C and S on, he thought.

THE ROBINSON R44 PILOT reports that he was in transit from Cumbernauld to a private HLS at Palgowan under VFR. He was in communication with Glasgow ATC and the assigned squawk was selected. The ML flown by the reporting pilot was not seen.

THE CZAW SPORTCRUISER MICROLIGHT OPERATOR comments that the same helicopter flew directly over the centre of the airfield earlier that afternoon heading for Cumbernauld at a height of about 500ft agl. Due to weather, there was no traffic at the airfield at that time, so there was no risk of an Airprox. No call was made on the SAFETY COM frequency.

This is the third Airprox involving a helicopter at Strathaven in about 12 months.

UKAB Note (1): The ML Operator also expressed his concern that little appears to be possible at unlicensed aerodromes to provide a measure of protection to cct traffic against ac transiting close to the site. An unlicensed A/D operator could develop a case for the establishment of an ATZ for consideration, subject to the provision of an Aerodrome Flight Information Service (FISO) (see DAP comment below).

ATSI reports that the R44 departed Cumbernauld for a VFR flight to Palgowan, Dumfries and Galloway.

The R44 pilot called Glasgow APP on 119.1MHz at 1712:14, flight details were given and a BS agreed. The R44 pilot stated that he would route via Strathaven. APP requested the R44 pilot report if a level above 2000ft was required, a squawk of A2602 assigned and the ac identified by the controller as it routed S, 14nm E of Glasgow Airport. The R44 pilot confirmed that no Mode C altitude reporting was available.

At 1720:30 the recorded radar data shows the R44 southbound about 3nm NNE of the notified position of Strathaven ML site. The CZAW ML pilot reported that, whilst on final approach to RW27, the R44 was observed in the ML pilot's 1 o'clock position, range 100 – 150ft and 50ft above.

The radar data shows the R44 passing 1nm E of Strathaven at 1722:26 on a SW'ly track and thence 1.1nm S of the ML site at 1723:23. There was no recorded radar data to indicate any other ac in the vicinity of Strathaven as the R44 passed by.

At 1723:40 the R44 was instructed to squawk A7000 and transferred to Prestwick TOWER.

The Glasgow 1720Z METAR: 08004KT 040V110 9999 SCT025 BKN031 11/10 Q1023=

Given the lack of recorded radar data for this Airprox [showing both ac] no ATSI Analysis or Conclusion will be given.

Further to the two Airprox at Strathaven in 2011 (2011011 and 2011063) ATSI made the following recommendation:

The CAA [Aeronautical Information Management Regulation] should determine whether or not the entry for the Strathaven Microlight Site in the UK AIP should be amended to include details of the vertical limits of activity at the site.

Therefore:

- (a) On 9 February 2012 the UK AIP ENR entry for Strathaven was updated to include more detailed information on activity at the site.
- (b) The Scotland VFR 1:500,000 chart is due to be updated in June 2012 to depict Strathaven as an area of 'Intense Microlight Activity'.
- (c) Other activities are also being progressed with wider applicability to ML flying in the UK in general and ATSI are aware that the operator at Strathaven and the local ATC unit have entered into a dialogue following recent events.

UKAB Note (2): The U.S. Naval Observatory archive astronomical data gives Sunset at Strathaven as 1752UTC and the end of Civil Twilight as 1829UTC.

DAP comments that any aerodrome operator may apply for an ATZ to be allocated to provide a degree of protection for ac operating in the immediate vicinity of the aerodrome; ATZ dimensions are set out at Article 258 of the ANO 2009. However, notwithstanding the ANO amendment to allow flying training at unlicensed aerodromes, the level of Air Traffic Control (ATC), Aerodrome Flight Information Service (AFIS) or Air Ground Station that an aerodrome requires to support an ATZ remains unchanged (RoA 2007 Rule 45).

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilots of both ac, a transcript of the relevant RT frequency, radar video recordings and a report from the appropriate ATC authority.

The Board recognised that although the R44 pilot was in receipt of a BS from Glasgow APP and had advised the controller he was transiting via Strathaven, APP would have no knowledge of specific cct activity at the site nor any responsibility to question the helicopter pilot's VFR routing or dictate to him how close he flew to the ML site, which was entirely a matter of airmanship. The R44's assigned squawk was evident on the radar recording as the helicopter transited 1nm E of Strathaven and therefore slightly further E than reported by the CZAW pilot. No Mode C was shown by the R44 so it was not possible to determine the helicopter's altitude at that point; however, the R44 pilot's brief report makes it clear that he did not see the CZAW ML as he flew past. The Board noted the difficulties associated with the ML site's geographic location; Strathaven's elevation of 847ft beneath the Glasgow CTA base of 3500ft, coupled with the Glasgow CTR to the NW, the relatively large town and windfarm to the E with the Edinburgh CTR further E, means it is situated in a potential choke-point for VFR traffic in transit between the CTRs. The HQ Air Ops fast-jet pilot Member commented that this was also a common transit route for jets. Notwithstanding the previous Airprox reported in the vicinity of Strathaven, the consensus amongst the Members was that it was not unreasonable for transit traffic to be encountered 1nm E of a ML site, but it was incumbent on transit pilots to maintain a careful visual scan for site activity and circuiting ac. The CZAW ML, despite its size and slow speed was there to be seen and the R44 pilot plainly had a responsibility to see and avoid other ac in Class G airspace. The Board agreed, therefore, that part of the Cause was a non-sighting of the CZAW ML by the R44 pilot.

The concern expressed by the Strathaven Operator about the apparent lack of protection afforded to unlicensed A/D cct traffic against other ac transiting close to the site was noted. The Chairman postulated a theory that because Strathaven is marked as a ML Site and not as an A/D on charts, it did not achieve the requisite impact and is not accorded the same level of significance by other airspace users; however, removal of ML designation would entail removal of the location from AIP ENR 5.5 (Aerial Sporting and Recreational Activities). Whereas Rule 12 to the RoFA was generally applicable, in a practical sense pilots might view the intensity and nature of operations differently if it was shown as an A/D and might therefore accord it a wider berth if they could. The Board discussed the expanded information on Strathaven's activity recently promulgated in the UK AIP and the chart amendment about to be implemented. The former had little time to take effect before the Airprox occurred, but the Board noted the imminent inclusion of the 'intense microlight activity' warning at the next update to the CAA VFR 1:500,000 chart, which should prove beneficial. It was up to the ML Site Operator to ensure that operations from this location were well-known to other operators and GA Members recognised the importance of good liaison locally. The topic of an ATZ was raised but the CAA Policy and Standards Advisor observed that many busy locations operate safely without an ATZ; he cited Popham as a busy GA A/D and one of many small aviation facilities across the country that operate successfully with only an A/G Station. The DAP Advisor emphasised the requirements for establishing an ATZ around Strathaven include the Operator providing the appropriate level of control/communication commensurate with Rule 45 of the RoA. The use of SAFETY COM did not fulfil such criteria and the Board recognised the importance of compliance with the provisions of Rule 45 to the RoFA to enhance safety and the implications of the provision of the various levels of control/communication. Members agreed that an ATZ might not be the answer here, but closer liaison with Glasgow ATC would be helpful. The main point was that an ATZ should not be seen as a 'brick-wall' that was impenetrable by other airspace users; the provision of the minimum levels of communication was essential to ensure the safety of those operating within it and those that desired to transit that airspace.

The CZAW ML was not shown on the radar recording, which was surprising to some Members because the pilot reported that he was also squawking the conspicuity code of A7000 with both Modes C & S on. Members could only conclude that the CZAW ML was not shown because it was

slightly lower than the R44 and therefore beneath coverage, or possibly that the pilot had inadvertently not switched it on. Members emphasised the importance of selecting SSR with Mode C whenever airborne and the benefits that accrue from the enhanced electronic conspicuity provided to ATC radar units and TCAS-equipped ac.

The R44 helicopter's small size can make it difficult to see; a virtually head-on aspect with little crossing motion to draw attention to it would increase this difficulty. Despite this the CZAW ML pilot saw the R44, albeit only a mere 100-150ft away. Under the RoA the CZAW ML was equally responsible for seeing an avoiding other ac, but here he was also responsible for 'giving-way' to ac on his right. This he did successfully albeit somewhat later than ideal. The Board agreed, therefore, that a late sighting by the CZAW ML pilot was the other part of the Cause.

The absence of recorded radar data on the CZAW ML did not allow the actual separation between the two ac to be gauged independently. Nevertheless, the CZAW pilot reports that after he saw the R44 he immediately turned L before the helicopter passed 50m away and 50ft above his ML. A controller Member commented that the approaching Sunset – 30min after the Airprox - might have made sighting difficult and perceived that an actual Risk of collision had existed here as the R44 pilot evidently remained unsighted on the ML, however, this was a solitary view. Others opined that although the CZAW pilot had spotted the R44 at a late stage, he had seen the helicopter in time to ensure that he was able to take effective avoiding action against it, thereby ameliorating any Risk. However, the majority view prevailed that whilst the CZAW pilot's robust manoeuvre had removed the actual risk of a collision, at these close quarters the safety of the two ac involved had indeed been compromised.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A non-sighting by the R44 pilot and a late sighting by the CZAW ML pilot.

Degree of Risk: B.