

AIRPROX REPORT No 2011011

Date/Time: 12 Feb 2011 1232Z (Saturday)

Position: 5541N 00406W
(Strathaven - elev 847ft)

Airspace: Scot FIR (Class: G)
Reporting Ac Reported Ac

Type: Pegasus Quantum AS355
Microlight

Operator: Civ Trg Civ Comm

Alt/FL: 1000ft 1800ft
(QFE) (QNH NR)

Weather: VMC CLBC VMC

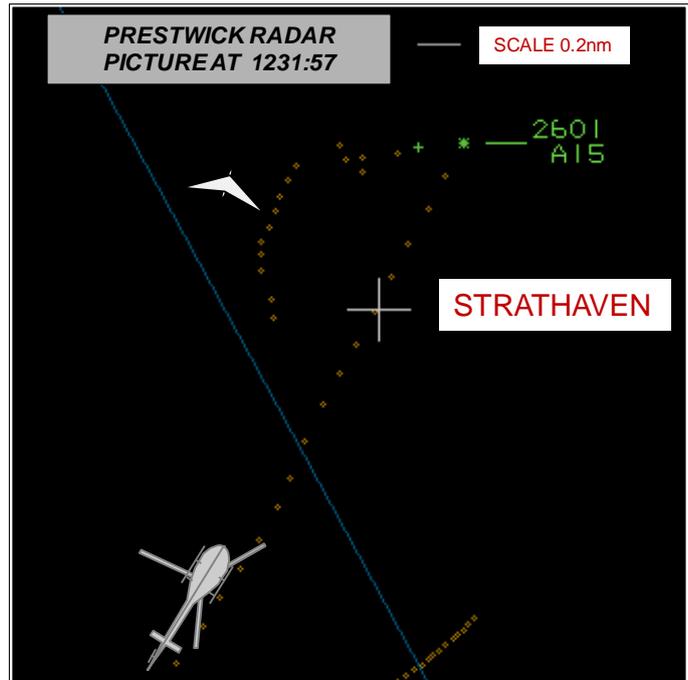
Visibility: 30nm 10km

Reported Separation:

200ft V/150m H NR

Recorded Separation:

Est 200ft (See ATSI report) V /0.2nm H



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE PEGASUS QUANTUM MICROLIGHT PILOT reports flying an instructional flight from Strathaven unlicensed airfield in a flexwing microlight, listening out on Safety Common. They were heading 090° at 50kt and 1000ft agl in the mid downwind position for RW27 (RH cct) and carrying out downwind checks, when a maroon helicopter appeared in his 3 o'clock about 200ft lower so he kept helicopter visual and continued to extend the downwind leg. The helicopter passed ahead through his 12 o'clock from R to L, about 200ft below. He assessed the risk as being medium and reported the incident to Glasgow ATC after landing and also to the helicopter airfield.

THE OPERATOR commented that ac, particularly helicopters, fly through the cct at least once a month. The airfield is 847ft amsl, just outside the Glasgow CTR, and they feel they are vulnerable to ac following Glasgow's standard instruction to remain clear of CAS not above 2000ft on the Glasgow QNH. Their circuit is at 1000ft agl which equates to 1847ft on the Glasgow QNH.

They are a busy microlight school with 3 instructors training on two three-axis and two weight-shift microlights. Not being licensed, they have no ATZ and so their chart symbol is just a small circle. This may become a problem at other airfields since light ac training is now permitted from unlicensed strips.

He spoke to the helicopter pilot who told him he that he would notify all company pilots of the location through his chief pilot.

THE AS355 TWIN SQUIRREL PILOT reports flying a burgundy coloured helicopter with all lights on, squawking as directed with Mode C in receipt of a BS from Glasgow APR while inbound to Cumbernauld under VFR. He was informed by TWR on landing that he had been involved in an Airprox but did not see any other ac in the position notified. At the time he had been heading 020° at 100kt and flying at an alt of about 1800ft.

THE Glasgow APR Controller provided a report but all aspects are covered in the ATSI report below.

ATSI reports that an Airprox in Class G airspace between a Pegasus Quantum Microlight (M'light) and an AS355 was reported by the M'light pilot in the vicinity of Strathaven at a height of 1000ft agl.

The M'light was operating in the vicinity of the grass strips at Strathaven from where it had departed, was maintaining a listening watch on 'Safetycom', but was not in receipt of an ATS. The AS355 had departed from a private site near Penrith and was in receipt of a BS from Glasgow APR while operating under VFR inbound to Cumbernauld 16nm ENE of Glasgow Airport. Glasgow ATC was unaware of the Airprox at the time and filed a unit report with ATSI in retrospect, when they were notified of the incident. ATSI had access to the pilots' reports, the RT and radar recordings.

The Glasgow METAR was:

EGPF 121220Z 08004KT 9000 FEW007 BKN014 OVC019 06/05 Q1007=

The UK AIP ENR 1-1-5-9 states:

'Those Microlight Flying Sites where flying is known to take place are listed at ENR 5.5 and are regarded as aerodromes. Sites are listed primarily as hazards to other airspace users...'; Strathaven is notified as a Microlight site (ENR 5.5) and is annotated on CAA VFR Charts both 1:500,000 and 1:250,000. The circuit height is not promulgated in the AIP or on the VFR charts.

The AIS VFR Route Brief from Carlisle to Cumbernauld, (12 Feb 11 1030-1430Z, VFR FL000 to FL050) did not notify Strathaven activity. NOTAMs are published in accordance with ICAO standards, are intended to cover information of a temporary nature/short term duration and can include information concerning the presence of hazards to air navigation.

At 1228:50 Glasgow APP established contact with the AS355 and instructed it to squawk 2601. At 1229:30 the ac was identified and a BS was agreed, "*c/s you are identified about one seven miles south south east of Glasgow it's a Basic Service report if you wish to climb above altitude two thousand feet V F R the Q N H one zero zero seven*"; the pilot read this back correctly. At the time the ac was tracking in a NE'ly direction, at an alt of 1600ft VFR, about 5nm SW of Strathaven.

Under a BS controllers will provide information useful for the safe and efficient conduct of flight. This may include general airspace activity information but the avoidance of traffic is solely the responsibility of pilots. Glasgow ATC reported that the unit's radar does not always show activity at Strathaven, which is 16.4nm to their SE and has an elevation of 847ft. Strathaven is 2.3nm outside the SE corner of the Glasgow CTR (Class D airspace, surface to altitude 6000ft). The preferred radar source for Glasgow APR is their Watchman primary and Glasgow SSR but Kincardine and Lowther Hill are also available when required; it is not known which source the controller was using at the time of the incident.

There is no requirement for Strathaven to inform Glasgow ATC when they are active and it is standard practice that Glasgow does not provide information on Strathaven activity.

The base of CAS above Strathaven is 4500ft amsl (Scottish TMA Class D), while just N, and for the remainder of the route to Cumbernauld, the base is 2500ft (Glasgow CTA Class E).

The M'light reported operating in the cct at Strathaven which has two unlicensed grass strips: 05/23 and 09/27; the direction of cct is to the north. The M'light pilot reported being mid-downwind RW27 at the time of the incident and that the circuit height at Strathaven is 1000ft agl.

At 1230:16 the radar recording (Prestwick Multi Radar Tracking) shows a primary only contact appear 0.9nm SW of Strathaven and the AS355 2.1nm SW of it. By 1231:16 the primary contact had passed W abeam Strathaven by about 0.4nm and the AS355 was 1nm S of it at 1300ft alt. The AS355 passed overhead Strathaven at an alt of 1500ft at 1231:37 and the primary contact had turned onto an E'ly track approximately 0.7nm N of Strathaven. At 1231:57, the AS355, on a NE'ly

track, passed through the primary contact's 12 o'clock at a range of 0.2nm, from right to left, at an alt of 1500ft. The M'light pilot reported that the AS355 passed 200ft below him but the AS355 pilot was unaware of the presence of the M'Light. The primary contact observed on the Prestwick MRT was such that its characteristics indicated it to be the reporting M'light i.e. the track flown and the position of the AS355 relative to the primary contact. Since the cct alt at Strathaven is 1847ft alt and the AS355 flew overhead at an alt of 1500ft (recorded) this substantiates the M'Light pilot's report that the AS355 flew about 200ft below.

Both ac were flying in uncontrolled airspace where responsibility for collision avoidance lies with the pilots. Glasgow APR had no information to suggest there was any activity at Strathaven, was not required to provide such information and the radar equipment at Glasgow is not reliable in detecting activity in that area.

The Glasgow weather was reported as overcast at 1900ft, which might have prevented the AS355 from climbing to a higher alt; in addition it was about to route underneath the Glasgow CTA, just N of Strathaven. Further, Glasgow APR had also requested that the AS355 report an alt of above 2000ft was required.

The location of Strathaven is such that any VFR traffic routeing to Cumbernauld, outside CAS from S of the Glasgow CTR, will pass close to the site. The AS355 flew over the Microlight site, which is notified in the UK AIP and annotated on CAA VFR charts; however, it is not known by what means the AS355 pilot was navigating. Pre-flight briefing information would not have notified the pilot of any activity at Strathaven.

The AIRPROX occurred when the AS355 flew overhead Strathaven, below the cct height.

The encounter happened due to several factors:

The Cloud-base precluded the AS355 (VFR) from climbing higher.

The location of Strathaven in relation to the Glasgow CTR and Glasgow CTA means that traffic routeing around and beneath controlled airspace respectively will likely pass close to Strathaven.

Whilst Strathaven is notified in the UK AIP as a microlight site (and depicted on standard navigational maps), there is no notification of the circuit height used at the aerodrome.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilots of both ac, transcripts of the relevant RT frequency, radar recordings, reports from the air traffic controllers involved and reports from the appropriate ATC authorities.

Members were briefed in detail on the location of Strathaven and the specifics of the site and surrounding controlled airspace; it was also noted that it is a grass airfield that is difficult to acquire visually. A controller Member familiar with the area also informed Members that despite the new Kincardine radar and the excellent coverage on the Prestwick composite recording shown above, due to the terrain and an extensive local windfarm, radar coverage at Glasgow can be poor in the locality. He also informed the Board that although there is a LoA between Strathaven and Glasgow ATC regarding gliding activity, as far as he is aware no such equivalent is in place regarding microlight operations; in any case since Strathaven is published in the AIP he thought that an ATC warning to VFR traffic that the airfield is active was probably not warranted.

The Board agreed that the helicopter pilot had probably not been aware of the existence of Strathaven, as it was most unlikely that a professional pilot would have overflown it deliberately. Members observed that there are differing standards of commercially available paper and electronic VFR charts; it is not known whether Strathaven is marked on any charts other than those produced

by the NATS on behalf of the CAA on which it is clearly marked. The DAP Advisor informed the Board that they are soon transferring to an electronic AIP which should ensure commonality among chart producers.

Notwithstanding the aspects above, it was clear that the AS355 pilot had overflowed Strathaven and flown through the downwind leg of the cct at cct height, albeit both unbeknown to him. The Board noted that the pilot had undertaken to disseminate information regarding Strathaven activity to his company thus reducing the likelihood of a recurrence.

Although the helicopter pilot did not see the microlight, its pilot saw the former throughout and this Members agreed had prevented any risk of a collision.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: The AS355 pilot flew through a notified and active Microlight Site and into conflict with the Pegasus Quantum, which he did not see.

Degree of Risk: C.