

## PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE VIKING PILOT reports conducting a winch launch on an instructional sortie. The white and 'dayglo' red aircraft was not fitted with external lighting, an SSR transponder, TAS or ACAS. The pilot was operating under VFR in VMC, in receipt of an A/G Service from 'Condor Radio'. Operations were being conducted from the westerly runway. Normal pre-flight checks were carried out and the launch was commenced after a delay in flying to allow a shower to blow through. Control of the aircraft had been handed over to the student during the full climb when the Instructor became acutely aware of the approaching cloudbase and, because of personal operating limitations, elected to curtail the launch at approximately 800ft. He took control of the aircraft, lowered the nose and released the cable. The height was estimated at 850ft. He levelled the aircraft and, heading 270°, immediately saw a light aircraft at the same level, slightly left of the nose, at a range of about ½nm. In his opinion there was a significant risk of collision so he initiated an immediate steep turn to the right. Whilst taking evasive action he heard a radio call reporting a light-aircraft in the circuit. His response was to report that he had the aircraft visual. Keeping the light-aircraft visual, he levelled the wings and observed it continuing in an easterly direction. The Instructor stated the other aircraft was a PA28 type; however, he was unable to see its registration number. His estimation was that the aircraft was at the same level as himself and passed less than 500ft down his left side. He curtailed the flight and landed.

He assessed the risk of collision as 'High'.

**THE PA28 PILOT** reports conducting a navigational sortie. The blue and white aircraft had 'all external navigation lights showing' and the SSR transponder selected on, with Modes A and C. The aircraft was not fitted with a TAS or ACAS. The pilot was operating under VFR in VMC, in receipt of a Basic Service from Dundee ATC. His intended route was planned to take him over Arbroath on the coast. However, the weather conditions deteriorated rapidly on his approach to the Arbroath vicinity and he was enveloped in a rain and mist cloud. Rather than climb out or turn 180°, he chose to descend, as he believed there was sufficient visibility and height below him. As he emerged from the mist bank and 'recovered his visibility', heading 050° at 95kt, he observed a glider about 1000m ahead and 500ft below him on the left side. It appeared to be flying straight and level. On sighting the Glider, he immediately turned right and headed toward the coast. The visibility subsequently deteriorated further so he elected to return to his departure airfield. On landing, he was asked to contact the glider operator. The pilot stated that he explained the circumstances with the glider pilot

and apologised to both the officer in charge of the glider operations and the pilot for any alarm his aircraft presence may have caused. The pilot noted that conversations between all parties were carried out in a very professional and civilised manner, concluding with his appreciation that it was felt necessary to file an Airprox.

He assessed the risk of collision as 'Low'.

## **Factual Background**

The weather at Dundee was recorded as follows:

METAR EGPN 071050Z 12003KT 9999 -RA FEW030 SCT045 10/07 Q1003 METAR EGPN 071120Z 03003KT 9999 -RA FEW030 SCT045 08/07 Q1003

Arbroath glider site is centred at 563455N 0023716W, and notified as operating up to 3000ft aal, HJ Fri, Sat, Sun and public holidays or as notified by NOTAM: 7 April 2014 was a Monday, and a NOTAM stating that the site was active had not been issued.

## Analysis and Investigation

# CAA ATSI

The Viking pilot was operating under VFR on a local flight and was in communication with Condor Radio. The PA28 pilot was operating under VFR on a local flight and was in receipt of a Basic Service from Dundee Approach/Tower.

ATSI had access to the reports from both pilots, area radar recordings and transcription of the Dundee Approach frequency.

Dundee provide an Approach/Aerodrome service without the use of any surveillance equipment. Area radar recordings did not show the incident. Arbroath gliding site is situated within EG R612 Arbroath, 1.5nm radius centred at 563449N 0023645W from surface to 6000ft, see Figure 1.



Figure 1

Note 5 for EG R612 states:

'RESTRICTED AREA – EG R612 ARBROATH. Flight permitted providing ATC RAF Leuchars confirm no intended balloon activity at the time the aircraft is expected to be over EG R612; ...'

It is unclear whether the PA28 pilot had obtained information on any expected activity in R612.

The PA28 pilot was given take off clearance from Dundee at 1006:38 and was instructed to report passing Broughty Castle. He subsequently reported "*at the castle climbing to the east*" and the service was changed to a Basic Service by Dundee. There were no transmissions between Dundee and the PA28 pilot between 1010:50 and 1032:10.

The PA28 pilot was in receipt of a Basic Service from Dundee without the aid of surveillance equipment and therefore traffic information could not have been passed.

#### **UKAB Secretariat**

Both pilots shared an equal responsibility to avoid collision and not to fly into such proximity as to create a danger of collision<sup>1</sup>. The PA28 pilot was required to integrate into the visual circuit at Arbroath or to avoid the area<sup>2</sup>, however, he could reasonably have assumed that the visual circuit would not be active, given the promulgated VGS operating hours and lack of NOTAM.

#### Comments

## HQ Air Command

Ultimately, the Viking captain's airmanship ensured that his aircraft remained clear of cloud and he detected and avoided the PA28. However, the decision to conduct flying outside the promulgated operating times and without a NOTAM meant that this barrier to MAC was absent. The PA28 captain's decision to proceed into an area of poor weather seems questionable; it certainly reduced the time available to respond to unexpected traffic. Moreover, whilst there is no evidence that the PA28 captain had ignored the rules relevant to R612, routing through such a zone (including the embedded glider site, whether active or not) appears to be a questionable airmanship decision.

#### Summary

An Airprox was reported when a Viking glider and a PA28 flew into proximity at 1120 on 7<sup>th</sup> April 2014 at Arbroath Glider Site. Both pilots were operating under VFR in VMC, the Viking pilot in communication with Condor Radio and the PA28 pilot in receipt of a non-surveillance Basic Service from Dundee.

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

Information available included reports from the pilots of both aircraft, radar photographs/video recordings and a report from the ATC operating authority.

The Board first considered the actions of the PA28 pilot. His routing had taken him towards unsuitable weather and he was 'enveloped in a rain and mist cloud'. He subsequently regained VMC, saw the Viking at a perceived range of 1000m, and took avoiding action. The Board opined that the PA28 pilot would have been better served by taking earlier action when he perceived the weather ahead to be unsuitable. Notwithstanding the privileges of his license, this would have allowed him to remain outside the 'mist bank' and maintain awareness of his position. The Board noted that a possible course of action would have been to turn around and return through the suitable weather just passed through. Ultimately, it was the pilot's responsibility in this case not to fly knowingly into cloud, and an earlier decision was required.

The Viking pilot was operating outside the glider site promulgated operating hours and without the protection of a NOTAM. Although the PA28 pilot should not have flown into the Restricted area, the Board agreed that a gliding NOTAM should have been issued, that doing so may have added to the

<sup>&</sup>lt;sup>1</sup> Rules of the Air 2007 (as amended), Rule 8 (Avoiding aerial collisions).

<sup>&</sup>lt;sup>2</sup> ibid., Rule 12 (Flight in the vicinity of an aerodrome).

PA28 pilot's pre-flight planning information, and in the process perhaps an understanding of the rules governing R612. It was also felt that local traffic could usefully be coordinated better and the Board resolved to recommend that Arbroath consider reviewing their notification procedures, including NOTAM issue and coordination with Dundee and RAF Leuchars before they commence flying operations.

Considering cause and risk, the Board felt that the Airprox was due to the PA28 pilot flying through R612 and the glider site and into conflict with the Viking pilot. After much discussion, it was agreed that it was likely the aircraft had been in close proximity and that this, coupled with the weather conditions, meant that safety margins had been much reduced below normal.

## PART C: ASSESSMENT OF CAUSE AND RISK

<u>Cause</u> :	The PA28 pilot flew through a Restricted Area and a promulgated, but not notified as active, Glider Site and into conflict with the Viking.
Degree of Risk:	В.
ERC Score <sup>3</sup> :	20
Recommendation(s):	Arbroath review their notification procedures, including NOTAM issue, and coordination with Dundee and RAF Leuchars.

<sup>&</sup>lt;sup>3</sup> 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.