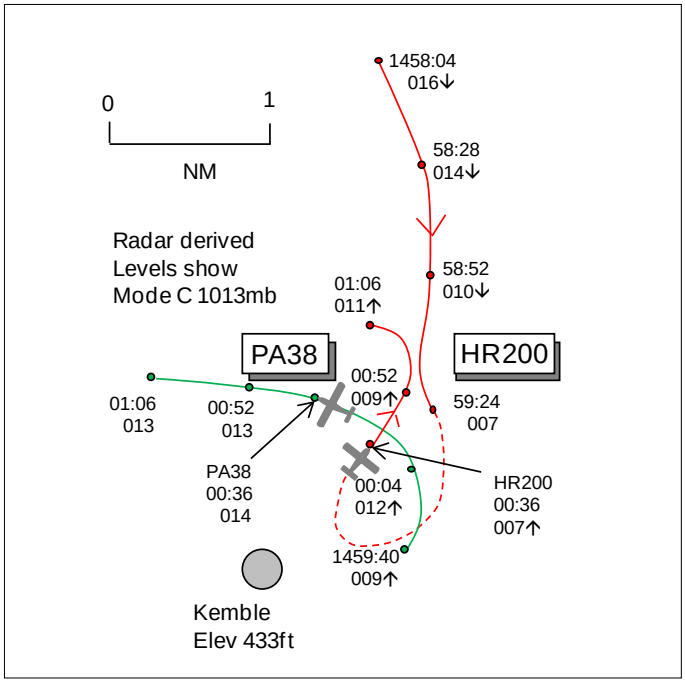
AIRPROX REPORT No 2011035

Date/Time:	17 Apr 2011 1500Z (Sunday)	
Position:	5141N 00202W (1nm NE Kemble - elev 433ft)	
Airspace:	ATZ	(*Class: G*)
	Reporting Ac	*Reported Ac*
Type:	PA38	Robin HR200
Operator:	Civ Pte	Civ Club
Alt/FL:	600ft↑ (QFE 1008mb)	1000ft ↓ (QNH 1022mb)
Weather:	VMC CLBC	VMC HAZE
Visibility:	8km	3500-4000m
Reported Separation:	200ft V	500ft V
Recorded Separation:	NR	



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE PA38 PILOT reports flying a solo sortie at Kemble VFR and in communication with Kemble Information on 118·9MHz, squawking 7000 with Mode C. The visibility was 8km flying 4000ft below cloud in VMC and the ac was coloured blue/white with nav and strobe lights switched on. He was turning onto the crosswind leg at 80kt following a touch and go from RW08 in a LH cct and climbing through 600ft QFE when he first saw another ac about 300-400m ahead, just L of the port side engine cowling, approximately 200ft below passing directly beneath. He called Tower and advised that an ac was approaching RW26 from R base having just passed beneath him. Kemble Tower did not respond to him but immediately advised other traffic to abort landing on RW26 as the RW in use was 08LH. The other ac's pilot apologised and aborted before Kemble Tower advised the pilot of a 3rd ac to turn R immediately; the position of this ac was unknown to the PA38 pilot. After reporting to the Tower post flight of his intention to file an Airprox, ATC had already briefed the other pilot of his error. Throughout his flight Kemble had advised all pilots that the RW in use was 08LH. He assessed the risk as medium.

THE ROBIN HR200 PILOT reports flying solo inbound to Kemble, VFR and in communication with Kemble Information on 118·9MHz, squawking with Mode C. The visibility was variable 5-6km out of sun; however, when flying directly towards the aerodrome at 1000ft QNH 1022mb at 90kt to enter the traffic pattern the afternoon sun reduced visibility to 3500-4000m. The ac was coloured white/red with nav and anti-collision beacon switched on. His approach path was severely restricted owing to considerable noise abatement areas surrounding the aerodrome. His request to ATC regarding areas to avoid (villages) received a reply of, "avoid all of them" so his approach was a weaving pattern to avoid villages and farms as they became visible. The aerodrome came in sight to the SW and he was in contact with ATC listening out for other traffic. He noted 1 departing ac about to take-off and 2 others in the cct; both of these ac he saw passed to the R. The ac taking-off became visible in the haze about 500-550m away and was seen to immediately take on a new course by turning L onto approximately 020° to cross the aerodrome boundary at an angle to the departure RW, presumably either to set course immediately or to comply with noise abatement procedure, or both. He turned R into the traffic pattern whilst the departing ac, a low-wing single-engine Piper type, was above his level and continued heading 020°, temporarily on a reciprocal heading about 500ft above. The departing ac's pilot called ATC stating, "Light ac below me approaching airfield". He continued turning R and was about to call ATC when he received an instruction, "Both ac to

immediately turn R for avoidance"; both flights turned R instantly. At this time the other ac had overflown his ac above and presumably continued on course after the R turn. ATC directed him on to downwind cct procedure with 2 ac ahead which completed their ccts and landed. No ac followed his ac, he thought, as he flew downwind, base and final. After landing he reported to ATC and discussed the incident with the 'controller' and he apologised for any part he played in it. He assessed the risk as none.

THE KEMBLE FISO reports RW 08LH in use. Visibility about 8km in haze, sunny. Traffic levels were moderate. The Robin flight called and was given relevant information, with RW and cct correctly read back. He then requested a R base join and was accordingly requested to report R base. He duly did so and was requested to report final. The PA38 pilot then reported final for a touch and go, which he duly performed before a PA28 then lined up and departed. The Airport Manager, acting as assistant, then noticed an ac turning R base for RW26. He immediately requested the PA28 pilot to perform a R turn; the PA38 was not at this time visible from the tower, but its pilot made a call indicating that the other ac had passed just below him.

ATSI reports that the Airprox was reported to have occurred at 1500, within the visual cct and to the NE of Kemble Airport. The ATZ consists of a circle, radius 2nm, centred on RW08/26 and extends from SFC to 2000ft above the aerodrome elevation (436ft).

The Airprox was reported by the pilot of a PA38 in the LH cct and the other ac was an Robin HR200 inbound to Kemble from Gloucestershire.

A FISO service is provided at Kemble. RW08 was in use with LH ccts with traffic levels reported as moderate.

CAA ATSI had access to radar recording, provided by NATS Swanwick, together with written reports from pilots and the FISO. The radar recording showed a number of ac in the vicinity of Kemble squawking 7000. However it was not possible to identify the ac concerned or the occurence itself.

Although not a requirement, Kemble do provide an RT recording facility but due to a fault, no recording was available for the period.

The weather for Lyneham is provided;
METAR EGDL 171450Z 03004KT 9999 FEW040 SCT060 17/09 Q1023 BLU NOSIG=

The FISO's written report indicated that the HR200 called for joining and was passed the relevant information with the RW in use and cct direction. After a correct readback the HR200 requested a R base join and the FISO asked the HR200 to report R base.

The HR200 pilot's written report indicated that the field was to the SW (i.e. approaching from the NE). It was not clear why the pilot requested a R base join for RW08.

The PA38 flight was in the LH cct for RW08 and reported on final for a touch and go. After the PA38 departed from the touch and go, a PA28 lined up and departed. The FISO assistant, noticed an ac turning on a R base for RW26 and this was later identified as the HR200.

The PA38 pilot indicated that, after completing the touch and go, when crosswind in a climbing L turn at a height of 600ft, the other ac (HR200) was observed passing below. The PA38 pilot advised Kemble about the other ac (HR200).

The PA38 pilot indicated that he heard Kemble FISO advise the HR200 to abort landing on RW26 as the RW in use was 08 LH.

The HR200 pilot's written report indicated that the ac was out of position, due to the avoidance of noise sensitive areas in haze and sun conditions. The HR200 pilot discussed the incident afterwards with the FISO.

The pilot of the PA38 indicated that a report was made to Kemble Tower after the flight.

No MOR report was received from the FISO; however, an internal FISO report was forwarded at a later date. The Kemble FISO manual, page 36. Paragraph 10.1, states:

> 'Reporting of incidents shall be carried out in accordance with CAP 410, CAP 382 and the Air Navigation Order (ANO).'

It was noted that the current version of CAP410 dated 7 March 2002, does not align with the ANO (and reflected in CAP382). For example CAP 410, Part A, Chapter 8, Page 2, paragraph 5.4, relates to MOR reporting and states:

> 'Although mandatory reporting applies only to public transport aircraft registered in the UK or operating under the jurisdiction of a UK Operator, and all turbine powered aircraft, FISOs are to report all occurrences regardless of the category or nationality of the aircraft.'

Whereas the ANO Article 226 (3) states:

> 'This article applies to occurrences which endanger or which, if not corrected, would endanger an aircraft, its occupants or any other person.'

The HR200 inbound from Gloucestershire was considered to be approaching the airfield from the NE and it was not clear why, approaching from that direction, the pilot wanted to join on R base for RW08.

The pilot of the HR200 indicated that the ac was out of position, due to the avoidance of noise sensitive areas in haze and sun conditions.

ATSI RECOMMENDATION

It is recommended that CAA ATSD should review and update CAP410 to ensure the document is correctly aligned to UK legislation.

UKAB Note (1): The Clee Hill radar recording does not capture the CPA but at 1458:04 shows a 7000 squawk (possibly the HR200) approaching Kemble from the N with 3·3nm to run descending through FL016 (1870ft QNH 1022mb) which fades after the sweep at 1459:24 1·5nm NE of Kemble at FL007 (970ft QNH 1022mb). Another 7000 squawk appears 16sec later, possibly the PA38, 0·9nm E of Kemble indicating FL009 (1170ft QNH) in a L turn passing heading 040°. The PA38 continues the turn towards the downwind leg and at 1500:36 indicates FL014 when 1·1nm N of Kemble turning through heading 280°. At the same time a 7000 squawk appears, believed to be the HR200, 0·5nm SE of the PA38, tracking 030° indicating FL007 (970ft QNH) and climbing. The PA38 rolls out downwind at 1501:06 at FL013 (1570ft QNH) whilst the HR200 climbs to FL011 (1370ft QNH) and also turns L onto the downwind leg 1·7nm NNE of Kemble.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilots of both ac, radar video recordings, a report from the FISO involved and a report from the appropriate ATC authority.

Members could not understand the HR200 pilot's mindset. He had been informed that the RW in use was RW08 but had positioned onto R base and then final for RW26 and this had brought his ac into conflict with the departing PA38, causing the Airprox. The HR200 pilot had reported seeing the departing PA38 and 2 other ac in the cct so this should have alerted him to the fact that he was approaching the 'wrong end' of the RW as they were flying in the opposite direction to his cct pattern. Members agreed that there was no substitute for carrying out a standard O/H join, particularly when

visibility is reduced, which allows the pilot concerned to orientate himself with the duty RW and integrate his ac into the pattern already established by other traffic in the cct. The PA38 pilot was undoubtedly surprised when, as he was turning onto the crosswind leg climbing through 600ft, he saw the HR200 300-400m ahead before it passed 200ft below. When the FISO became aware of the HR200's position – without an RT transcript there was no corroboration of what was said or when the transmissions were made – the HR200 pilot was informed of his error and the traffic sequence was re-established. The HR200 pilot reported sighting the PA38 and estimated that it passed 500ft above his level. Members believed that from the geometry of the encounter, with the HR200 fading at 970ft QNH on R base shortly before the PA38 appears climbing through 1170ft QNH (637ft QFE), the vertical distance between the ac was more likely to be in the region of those reported by the PA38 pilot - 200ft; if the separation had been 500ft, the HR200 would have been flying very close to the ground some distance from the RW. Taking all of these elements in account the Board considered that the flightpaths flown by both pilots had led to safety being compromised during this Airprox.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: The Robin HR200 pilot joined for RW26 when RW08 was in use, and flew into conflict with the PA38.

Degree of Risk: B.