

## AIRPROX REPORT No 2011081

Date/Time: 3 Jul 2011 1303Z (Sunday)

Position: 5050N 00020W  
(Shoreham - elev 7ft)

Airspace: ATZ (Class: G)

Reporting Ac Reported Ac

Type: C152 DA40

Operator: Civ Trg Civ Trg

Alt/FL: 1100ft 1100ft  
(QFE 1018mb) (QFE 1018mb)

Weather: VMC CLBC VMC NR

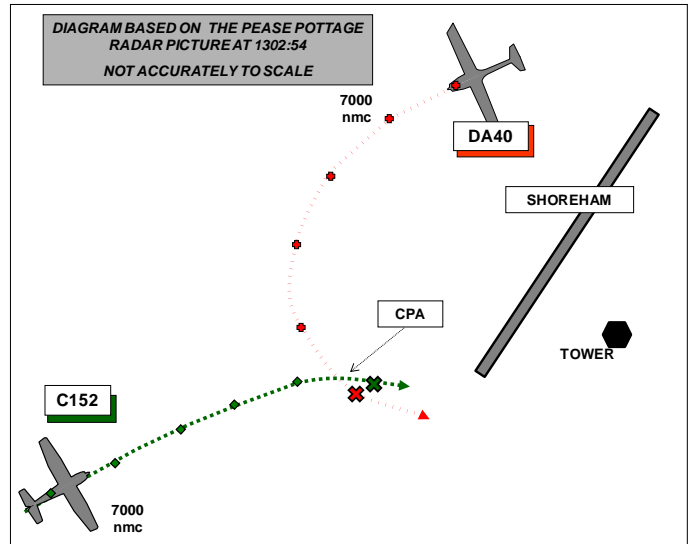
Visibility: >10km 10km

Reported Separation:

200ft V/60m H NR

Recorded Separation:

NR V/ est 0 H (between sweeps)



### PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

**THE C152 PILOT** reports flying a VFR dual training flight with the student as HP in a white ac with the anti-collision light switched on, at the time in receipt of a BS from Shoreham APP, squawking 7000 but Mode C was not fitted. They were heading 110° at 90kt to join the cct for RW20 (L hand) having been instructed to join crosswind at cct height. When approaching crosswind (0.3 DME) he noticed an ac 100m away, turning towards them and descending from the overhead; its pilot then called 'descending dead side' and ATC replied that they should not have descended because they were told to report overhead. (The ac had not been cleared to descend). The ac then appeared in a position some 200ft vertically and at a similar distance horizontally, in his 10 o'clock position so the instructor took control and initiated immediate avoiding action by diving, as the other pilot had clearly not seen them.

He reported the incident to ATC by telephone after landing, assessing the risk as being high.

**THE DA40 PILOT** reports flying a VFR training flight Shoreham and return via the Manston overhead with passenger, in a white ac with all external lights switched on. At the time they were in contact with Shoreham APP and squawking.

During their arrival at 90kt he contacted Shoreham APP about 5nm to the E of Brighton Marina at 2000ft and requested a standard overhead join for RW20 LH and he was instructed to continue inbound and report overhead.

Once overhead the airfield he tried to contact Shoreham APP to report overhead but the radio was busy at the time and he could not get through to them so he decided to continue and descended on the dead side, after checking that there were no conflicting ac. This is standard procedure for Shoreham Airport [he thought – see AIP extract below] where he had conducted the first half of his PPL, from which he recalled that ATC would normally clear ac for a standard overhead join.

About half way through the descent, he managed to get a call through informing APP that he had commenced a descent on the dead side and the controller acknowledged his call and did not issue any further instructions (as far as he can recall).

About 20sec, when he had levelled at 1100ft QFE another ac made a call saying that he had nearly 'landed on his head'. He then saw the ac off to his LH side, stopped his descent and made a turn away from the other ac to increase separation whilst maintaining a good look out.

He also offered to make a RH orbit but Shoreham APP declined. He subsequently ended up having to do a go-around as he could not increase the horizontal separation sufficiently for a safe landing.

The controller then came back on the radio, whilst he was on cross-wind, saying that he should be careful when descending in a low wing ac when other high wing ac in the cct. Although he agrees and he is always careful when descending, he was not informed of the other ac at any point during his contact with Shoreham. He also feels that this comment would have been better saved for when he was on the ground as at this point, he still had to fly the ac and it may have concerned his 'first trip passenger'; nevertheless, he expressed his apologies over the radio and informed Shoreham APP that he had tried to call 'overhead' but could not get through.

He conducted a safe landing and taxied back then informed the operations desk as to what happened and they subsequently received a call from Shoreham TWR informing that the other pilot may file an Airprox report.

Since the event, he has had a thorough briefing from a company instructor on the standard overhead join at Shoreham and what to do if he cannot get his call in to ensure that this will not happen again.

He apologised for the delay in his report caused by his being out of the country engaged on other work.

**ATSI** reports that the Airprox occurred at 1302:53, 0.6nm SW of the Shoreham ARP, in the Class G airspace of the Shoreham ATZ, which consists of a circle, radius 2nm, centred on RW02/20 and extending to 2000ft aal (7ft).

The Airprox was reported by the pilot of a C152; the other ac was a DA40. Both ac were operating on local VFR flights from Shoreham Airport.

The Shoreham controller was operating a combined Aerodrome and Approach control position, without the aid of surveillance equipment, RW20 was in use with a LH traffic pattern. The workload was assessed as medium and the controller reported being comfortable with traffic levels.

The UK AIP page AD 2-EGKA-1-7 (29 Jul 10), paragraph 6, states:

- c) Circuit heights are 1100ft aal for all runways.
- d) Variable ccts at discretion of ATC.
- e) Unless otherwise instructed ac joining the cct will overfly the aerodrome maintaining 2000ft aal, until instructed to descend to cct height on the inactive (dead) side of the runway in use and join the cct by crossing the upwind end. Pilots should note that there would frequently be helicopters operating both 'liveside' and 'deadside' in the ATZ up to 600ft.

ATSI had access to radar recordings, provided by NATS Swanwick and written reports from both pilots.

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Two other ac had been given joining instructions; an AA5 was joining the deadside from the N and a Cessna was inbound from the E to join overhead at 2000ft

At 1254:45, the DA40 called Shoreham Approach, "(DA40)c/s is a Diamond Star D A forty inbound currently five miles to we- to the east of Brighton Marina at two thousand feet information Hotel received on a Q N H of one zero one eight request a standard overhead join runway two zero

*lefthand*”, the controller replied, “(DA40)c/s report overhead at two thousand feet two others joining” and the pilot acknowledged, “Report overhead at two thousand and two others (DA40)c/s”.

The C152 pilot called Shoreham APP at 1256:44 reporting, “(C152)c/s just passed *er* Littlehampton *er* sixteen hundred Hotel one zero one eight requesting crosswind join” and was instructed, “(C152)c/s crosswind join approved at cct height report N abeam Worthing pier look out for an A A five joining *er* from the northwest to the deadside and two others joining”, the C152 pilot replied, “Traffic’s copied Worthing pier and *er* expect crosswind cct height (C152)c/s”. [Note: cct height is 1100ft]. The controller stated that Worthing Pier is a point where updated TI would normally be passed to traffic joining crosswind.

The other Cessna reported overhead at 1257:22 and was instructed to descend deadside and report crosswind.

The controller passed TI to the C152 at 1258:31, “(C152)c/s lookout for an A A five approaching from the deadside” and the pilot replied, “*er* thats copied I’ve still got about 6 miles to run”.

The AA5 inbound from the N, reported approaching the deadside and the controller instructed the pilot to keep a good lookout for the Cessna descending deadside. Subsequently the Cessna turned onto a wide crosswind and the AA5 pilot requested a short cct to position ahead, which was approved.

It was noted that the C152 did not call N abeam Worthing Pier and the DA40 pilot did not call overhead at 2000ft.

The radar recording shows the DA40 on the deadside in a L turn towards the crosswind leg with the C152 also approaching crosswind at 1302:48; neither ac is displaying Mode C and the distance between the two ac as they converge is 0.3nm.

At 1302:50 the DA40 reported, “(DA40)c/s been descending on the deadside approaching crosswind” the controller replied, “(DA40)c/s thank you report turning downwind” and almost immediately at 1303:00 the C152 pilot reported, “(C152)c/s ????? (DA40)c/s nose is literally on my head.”

The controller stated that visual contact with the two ac was acquired just as they made the RT calls and when the CPA occurred.

The radar recording shows the tracks of the two ac crossed at 1302:55 and at 1302:57 shows the two ac diverging with a horizontal separation of 0.1nm and increasing with the C152 inside the DA40 on the crosswind leg.

The controller asked the DA40 pilot, “(DA40)c/s do you have the Cessna on your L” and the pilot responded, “Affirm would you like me to make a right hand orbit”, the controller advised, “No - just position number two” and this was acknowledged by the pilot. The controller did not consider at that point, that there was any need for the DA40 to make a RH orbit.

The controller then advised the DA40 of the requirement to call before descending particularly in low wing ac, as ac below might not be seen. The pilot responded that he had been trying to get through on the radio.

The controller was asked if the pilot of the DA40, who had requested a standard overhead join, might have considered that descent into the cct was approved but he indicated that Shoreham had specific, promulgated procedures for overhead joins that required a pilot to maintain 2000ft until instructed to descend to cct height on the dead side. The controller believed that the DA40 pilot had been instructed to report overhead at 2000ft and being a locally based pilot, should have been familiar with Shoreham procedures.

When the DA40 called for a standard overhead join, the pilot was instructed to 'report' overhead at 2000ft and passed TI, '2 others joining'.

The C152 called when passing Littlehampton and was instructed to join crosswind at cct height and to 'report' N abeam Worthing pier, which is the point where the controller would normally pass updated TI to ac joining crosswind. However, the C152 was initially given TI on the other ac joining, 'lookout for an AA5 joining from the NW and 2 others joining'.

The C152 pilot did not report N abeam at Worthing Pier and the DA40 pilot did not report overhead at 2000ft. Both of these calls would have updated the SA of the controller and allowed the update of TI. The RT loading was high and this might have contributed to the pilots' missed calls; however, these calls were considered to be an important trigger for the integration of traffic into the cct allowing the update of position and TI.

Both pilot's had been given general TI on the cct situation and were operating VFR on the 'See and Avoid' principle.

The Airprox occurred when the DA40 did not report overhead, as instructed by ATC, and descended on the dead side without approval.

The C152 did not report N abeam Worthing Pier, as instructed by ATC, and this is considered to be a contributory factor.

Both ac had been passed general TI on the number of ac joining the cct and in good flight conditions, with visibility greater than 10km, the respective pilots were responsible for positioning into the cct VFR using the 'see and avoid' principle.

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

Information available included reports from the pilots of both ac, transcripts of the relevant RT frequencies, radar recordings, reports from the air traffic controller involved and reports from the appropriate ATC authority.

The Board noted the Shoreham procedures as promulgated in the UKAIP and summarised in the ATSI report above.

It was clear to Members that the DA40 pilot was instructed to report overhead, that the Shoreham joining procedure in the UKAIP states that ac should 'maintain 2000ft aal until instructed to descend' and that he did not comply with this. Members were however, divided regarding the correct course of action when pilots are, as in this case, in the awkward situation where they are unable to communicate with ATC due to continuous RT traffic; most however, agreed that ac should hold (in the overhead at 2000ft) but not descend until a break in the transmissions allows a request to be approved. This opinion was endorsed by the CAA Flight Ops Advisor.

It was unclear to Members whether the missed position report at Worthing Pier by the C152 pilot had any substantial impact on the incident; it was agreed however, that it would have allowed the controller to formulate a more accurate air picture.

Both ac were operating in the 'see and avoid' area of the (join or) visual circuit and although the DA40 pilot did not see the C152 until after the CPA, the latter pilot saw the former just in time to take effective avoiding action. Members agreed however, that the lateness of this avoidance had been such that the safety of both ac had been compromised.

The Board also agreed that it is invariably poor RT discipline to comment on or criticise pilot's actions on the radio. It is always better to debrief and learn from any incidents later on the ground in a calm and reasoned manner.

**PART C: ASSESSMENT OF CAUSE AND RISK**

Cause: The DA40 pilot did not follow the Shoreham joining procedure and descended into conflict with the C152, which he did not see.

Degree of Risk: B.