AIRPROX REPORT No 2013003

		10000	
Date/Time: 12 Jan 2013 1514Z (Saturday)			Diagram based on pilot reports NOT TO SCALE
Position:	5130N 00047W (White Waltham – elev 133ft)		
<u>Airspace:</u>	White Waltham ATZ (<u>Class</u> : G)		
	<u>Reporting Ac</u>	<u>Reporting Ac</u>	CPA1514 CJ6
<u>Type</u> :	PA18	Nanchang CJ6	
<u>Operator</u> :	Civ Trg	Civ Pte	
<u>Alt/FL</u> :	240ft (QFE NR)	250ft (QFE NR)	
<u>Weather:</u> <u>Visibility</u> :	VMC CLBC 20km	VMC HAZE 10km	
Reported Separation:			
	100ft V/100m H	NR V/100ft H	
Recorded Separation:			White Waltham A/D
	NR		
BOTH PILOTS FILED			

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE PA18 PILOT reports that he was instructing a cct refresh exercise with an experienced, tailwheel rated, student pilot. He was operating under VFR in VMC in receipt of an A/G service from Waltham Radio [122.600MHz]. He was seated in the rear seat, with the other pilot seated in the front seat. The yellow ac's tail mounted strobe light was selected on. The ac was not fitted with an SSR transponder or an ACAS. He was aware from RT transmissions that one of his colleagues, in a PA28, had just had a 'near miss' with a CJ6. He was visual with the PA28 as it turned early crosswind but could not see the other ac. He was established on final approach, heading 110° at 50kt at a height of about 240ft and the pilot student had transmitted his intentions to 'stop and go' when the A/G operator asked him whether he had seen the CJ6. He looked to his L and had a fleeting view of the CJ6 in his L 8 o'clock position at a range of 300m before it passed underneath his ac, crossing from L to R. He believed the 2 ac were going to collide and that there was insufficient time to take avoiding action, before the other ac passed below.

He assessed the risk of collision as 'High'.

THE CJ6 PILOT reports intending to conduct a short flight to include aerobatic training/practice. He was operating in a non-radio ac under VFR, in VMC. The green camouflaged ac had navigation and landing lights selected on. The ac was not fitted with an SSR transponder or an ACAS. After departure he had cockpit indications of an electrical failure; he completed the emergency checklist, which included advice to land at the nearest suitable A/D, and decided to return to White Waltham. He flew a 'PFL cct' with a constantly descending turn onto short finals. After sighting a PA28 he performed a go around to the deadside, keeping the other ac on his L. He observed the PA28 leave the cct pattern and 'turned in again', this time 'keeping an eye over [his] shoulder for him'. Just before turning final he rolled wings level 'to adjust' and saw a 'yellow Cub' in his R 2 o'clock position, crossing from R to L slightly below, on very short finals at a height of 250ft. He extended on the base leg, flew behind the Cub and went around again.

He assessed the risk of collision as 'Low'.

He commented that when downwind, he was 'looking into sun for ac on base and final on a hazy afternoon'.

ATSI reports that the Airprox occurred at White Waltham A/D within the ATZ, Class G airspace, between a Piper PA-18-150 Super Cub (PA18) and a Nanchang CJ6, an ex-military, 2 seat tandem, training ac. The White Waltham ATZ comprises a circle of radius 2nm, centred on the midpoint of RW07/25 and extending from the surface to a height of 2000ft aal (elevation 133ft).

The PA18 was being operated under VFR in the visual LH cct for RW11. The CJ6 pilot departed White Waltham non-radio for a VFR training flight, to include aerobatic practice.

White Waltham is operated by the West London Aero Club (WLAC) and lies on the boundary of the Class A CAS London CTR, which extends from surface to altitude 2500ft. The W portion of the ATZ lies within Class G airspace and the E portion, the White Waltham Local Flying Area (WW LFA), lies within the London CTR. Flights within the WW LFA are restricted to a maximum altitude of 1500ft.

The UK AIP, pages AD 2-EGLM-5 and 6 state:

'White Waltham operates an Air/Ground radio on frequency 122.600MHz, in the winter from 0800 UTC to sunset.

Users of the aerodrome should be familiar with the West London Aero Club Flying Order Book (FOB) which is available at the aerodrome or on the [WLAC internet site]. All joins normally overhead at 1300ft QFE; circuit height 800ft QFE.'

RW11 was in use; the promulgated cct pattern to be flown appears in the WLAC FOB and is shown in a proprietary flight guide and on the WLAC web site, as shown below.



The ANO Rule 45 (5) states:

'If there is no flight information service unit at the aerodrome the commander shall obtain information from the air/ground communication service to enable the flight to be conducted safely within the zone.'

The White Waltham FOB, Section 1, Paragraph 2.5, states:

'...all flights on private aircraft are to be booked in and out on the sheets provided in Operations...'

The UK AIP, page AD 2-EGLM-1 (13 Dec 2012), AD 2.3 (12), Remarks, states:

'This aerodrome is PPR by telephone only.'

The proprietary flight guide entry for White Waltham, states:

(Remarks) Non-radio aircraft require telephone briefing from Operations prior to each flight.'

CAA ATSI had access to area radar recording, together with written reports from the two pilots concerned and a local investigation report. CAA ATSI also discussed the incident with the A/G operator.

[UKAB Note(1): Both sets of primary only returns, judged to correspond to the 2 subject ac, fade before CPA].

The Heathrow A/D weather was recorded as follows:

METAR EGLL 121450Z 09015KT 9999 BKN047 04/M02 Q1011 NOSIG= METAR EGLL 121520Z 09013KT 9999 FEW037 BKN045 04/M02 Q1011 NOSIG=

Factual History

The PA18 pilot's written report indicated that he was aware of an Airprox [2013/002] on short final for RW11, between a PA28 and a CJ6 at approximately 1511. The PA18 pilot reported that he had sight of the PA28 turning crosswind after a go around, but was unable to see the CJ6.

When questioned, the White Waltham A/G operator indicated that he had not seen the CJ6 reposition in the circuit, but sighted the PA18 and the CJ6 on short final for RW11. The A/G operator passed a warning, asking if the PA18 pilot was visual with the CJ6; the A/G operator indicated that the PA18 pilot had responded, 'Affirm I am now'.

The PA18 pilot's written report indicated that, when at 240ft QFE, he sighted the CJ6 behind and to the L, before it passed underneath his ac. The PA18 pilot initially thought that the risk of collision was high and considered there was insufficient time to take avoiding action.

The A/G operator reported that he had observed the CJ6 disappear below the tree line and then reappear before going around on the RH side of the PA18.

The White Waltham Aerodrome operator's safety sub-committee completed an investigation which included a number of recommendations. Their report noted that the CJ6 pilot had not booked out and had not informed anyone that he was operating non-radio.

White Waltham intend to review their procedures for the operation of non-radio ac and will amend the Operations Manual/Flying Order Book and appropriate pages of the UK AIP.

Analysis

White Waltham does not provide ATC or FISO services and requires pilots to comply with the Flying Order Book. In Class G airspace, pilots are ultimately responsible for their own separation on the principle of 'see and avoid'. For flight within the vicinity of an aerodrome, RoA Rule 12, states that the commander shall:

'conform to the pattern of traffic formed by other aircraft intending to land at that aerodrome or keep clear of the airspace in which the pattern is formed...'

The CJ6 pilot did not obtain information from the A/G operator to ensure that the flight was carried out safely within the ATZ and the pilot did not book out or report that he was operating non-radio.

After an Airprox with a PA28, the CJ6 pilot went around and repositioned for a further circuit and flew into close proximity with the PA18 already established in the circuit and on short final. Conclusions

The Airprox occurred when the CJ6 pilot, having gone around due to an earlier Airprox with a PA28, then repositioned for a second cct, without conforming with the cct pattern already established, and flew into close proximity with the PA18.

[UKAB Note(2): Rule 13(Order of landing) of the RoA states:

(1) An aircraft landing or on its final approach to land shall have the right-of-way over other aircraft in flight or on the ground or water.

(2) An aircraft shall not overtake or cut in front of another aircraft on its final approach to land.

• • •

(4) If the commander of an aircraft is aware that another aircraft is making an emergency landing, he shall give way to that aircraft.

...

Rule 17(Notification of arrival and departure) of the RoA at paragraph 2 states:

'The commander of an aircraft arriving at or departing from an aerodrome in the United Kingdom shall take all reasonable steps to ensure, upon landing or prior to departure, as the case may be, that the person in charge of the aerodrome or the air traffic control unit or flight information service unit at the aerodrome is given notice of the landing or departure.']

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 air/ground operator involved and reports from the appropriate operating authorities.

The PA18 pilot appeared to be conforming to the pattern of traffic in the White Waltham cct so the Board concentrated its deliberations on the actions of the CJ6 pilot. The pilot did not notify his departure, contrary to Rule 17(2) (Notification of arrival and departure) of the RoA, or that he would be operating non-radio, contrary to the White Waltham FOB. The White Waltham A/G Operator was therefore unable to notify other ac in the cct that the CJ6 pilot was operating non-radio. Having departed the cct, experienced the ac emergency and carried out the checklist actions, he made the decision to return to White Waltham A/D where he carried out a 'PFL cct' which culminated in Airprox 2013/002 involving a PA28. RT calls by the PA28 pilot alerted the PA18 pilot to the presence of the CJ6 in the cct and the absence of RT calls from the CJ6 pilot should have alerted cct traffic and the A/G operator to the possibility that the CJ6 pilot was operating non-radio. The Board noted that extra consideration needs to be given to non-radio ac in what is normally an RT environment. The RoA Rule 13(4) states that 'If the commander of an aircraft is aware that another aircraft is making an emergency landing, he shall give way to that aircraft.'. After some discussion, the Board concluded that the PA18 pilot could not have known that the CJ6 pilot had an emergency, only suspected that he was operating non-radio, and that it was therefore the CJ6 pilot's responsibility to conform to the pattern of traffic intending to land, iaw Rule 12. The CJ6 pilot reported maintaining visual contact with the departing PA28; the Board opined that this, in conjunction with his short pattern cct, did not allow him time to assimilate the position of other cct traffic and therefore to conform to the pattern of traffic intending to land. In the event, he flew into conflict with the PA18 on final which he did not see until he rolled wings level just before turning final himself. Given this late sighting by the CJ6 pilot and the fact that the PA18 pilot's sighting was too late to take avoiding action, Board Members were unanimous in their assessment of the severity of the confliction and that safety margins had been much reduced below normal.

PART C: ASSESSMENT OF CAUSE AND RISK

<u>Cause</u>: The CJ6 pilot did not conform to the pattern of traffic formed and flew into conflict with the PA18 on final, which he had not seen.

Degree of Risk: B.