

## **AIRPROX REPORT No 2013139**

**Date/Time:** 20 Sep 2013 1531Z

**Position:** 5052N 00044W  
(Goodwood House)

**Airspace:** Goodwood ATZ (**Class:** G)

**Aircraft 1**                      **Aircraft 2**

**Type:** Spitfire                      C172

**Operator:** Civ Comm              Civ Comm

**Alt/FL:** 500ft                      600ft  
QNH (NK hPa)              NK

**Conditions:** VMC                      VMC

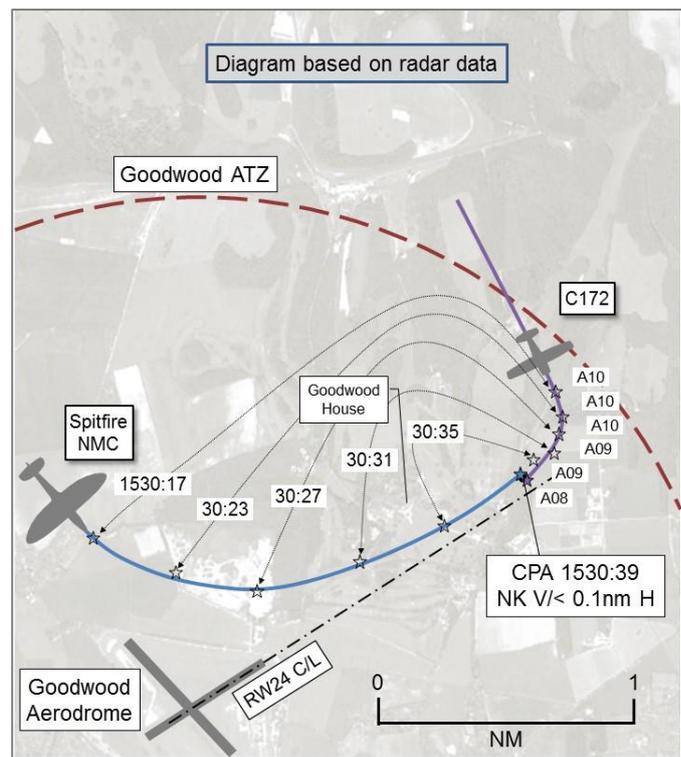
**Visibility:** 10km                      10km

**Reported Separation:**

150ft V/0ft H                      300ft V/0ft H

**Recorded Separation:**

NK V/<0.1nm H



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

**THE SPITFIRE PILOT** reports preparing for a NOTAM'd display at Goodwood House. The grey and green camouflaged aircraft had the SSR transponder selected on with Modes A and C, he thought<sup>1</sup>; Mode S was selected off. The aircraft was not fitted with a TAS or ACAS; the lighting state was not reported. The pilot was operating under VFR in VMC, in contact with the Goodwood FISO. The airport manager had been notified of the display time (1530) and the tower controller reminded of the display time on taxi out at 1510. The pilot took off from RW24 at 1520, squawking 7004<sup>2</sup> for the display, and 'exited ATC' to the north for pre-display practice at height. At 1527, a Piper Cub pilot called the FISO, stating he was joining from the south for an overhead join. The Piper Cub pilot stated that he was aware of the flying display and asked to hold in the overhead, requesting the vertical limit of the display. The FISO did not initially respond so the Spitfire pilot responded, stating '3000ft'. His transmission was blocked and 'some confusion followed' with 2200ft mentioned. This caused the Spitfire pilot some concern and, after some more transmissions, the Cub pilot confirmed he would hold at 3500ft. The Spitfire pilot was 'happy that this was safe' and ran in to commence his display at 1530. As he rolled wings level from a 'top-side pass', heading 060° at 310kt and anticipating a 4g pull for a half Cuban, he saw 'a Cessna' in his 12 o'clock at a range of 300m and about 150ft above. He flew underneath, started a flat turn to maintain visual contact with the other aircraft and 'notified ATC'. Once he had satisfied himself that the other aircraft was 'no longer a threat' he resumed the display without further incident. After landing, he established that there had been a low-hours solo student in the visual circuit. The Spitfire pilot stated that he had the Goodwood frequency selected 'at listenable volume' but that he was focused on the display. He noted that the communications between himself, the Cub pilot and the FISO had distracted his attention away from the fact that there was an aircraft in the visual circuit.

He assessed the risk of collision as 'High'.

**THE C172 STUDENT PILOT** reports conducting solo circuits. The predominantly white aircraft was fitted with an SSR transponder with Mode A and C selected; Mode S was selected off. The aircraft lighting and TAS/ACAS state was not reported. The pilot was operating under VFR in VMC in the Goodwood visual circuit, in receipt of an Aerodrome Information Service from 'Goodwood

<sup>1</sup> The radar replay did not display any Mode C derived altitude data for the Spitfire.

<sup>2</sup> See UK AIP ENR 1.6-4 dated 4 Apr 2013.

Information'. He had completed a number of 'touch and goes' with his instructor and then 'took control' of the Cessna for solo circuits, hoping to do 5 or 6 'touch and go' approaches. He had successfully completed 4 circuits and, on the 5<sup>th</sup>, reported downwind for another touch and go. However, the 'air traffic controller' told him that this was not possible, as there was an air display about to start and that he should land from his next approach. He turned on to the 'base leg' and then on to 'finals' and reported 'final approach to land'. Just after this, he noticed a Spitfire pass beneath him, which he estimated to be at least 300 feet below. He landed shortly afterwards and stated he did not feel concerned about his safety at any point.

He assessed the risk of collision as 'None'.

## Factual Background

The weather conditions at Goodwood were not recorded. The Southampton (23nm west-northwest) and Shoreham (18nm east) weathers were recorded as follows:

METAR EGGH 201520Z 27001KT 9999 FEW034 18/08 Q1020  
METAR EGKA 201520Z 23012KT 9999 FEW038 16/11 Q1020

The Spitfire display was the subject of NOTAM H4719/13, reproduced below:

(H4719/13 NOTAMN  
Q) EGGT/QWALW/IV/M /AW/000/030/5052N00045W002  
A) EGHR B) 1309201415 C) 1309201645  
E) AIR DISPLAY/AEROBATICS WI 2NM RADIUS 505223N 0004447W (GOODWOOD HOUSE, WEST SUSSEX). 13-09-0608/AS 5.  
F) SFC G) 3000FT AMSL)

A certified transcript of the Goodwood tower frequency is reproduced below:

From	To	Speech Transcription	Time <sup>3</sup>
Spitfire	FISO	Er tower Spitfire [C/S]	
Unknown	FISO	????? ????? Touch and go	
FISO	Spitfire	[Spitfire C/S] go	
Other ac	FISO	[Other ac C/S] lined up runway two four ready departure	1515:00
FISO	Other ac	[Other ac C/S] er take off your discretion surface wind two zero zero nine knots	
Other ac	FISO	Roger take off my discretion thank you	
C172	FISO	[C172 C/S] late downwind	
FISO	C172	[C172 C/S] roger one aircraft reported ahead	
C172	FISO	[C172 C/S] got him	
FISO	Spitfire	And Spitfire [C/S] you were calling	
Spitfire	FISO	Affirm [Spitfire C/S] I think I spoke to you earlier about it I've got a display at the house at four thirty	1515:37
FISO	Spitfire	Yeah sir we got it in the diary er we got you displaying dead on the dot at fourteen thirty er I'll make sure there's no circuit traffic at that time	
Spitfire	FISO	Er copy just confirm it's sixteen thirty	
FISO	Spitfire	Sixteen thirty local roger	

<sup>3</sup> ATSI established that there was a 4min 30sec timing error on the Goodwood voice track timing injection. The transcript timings have been adjusted to show the correct time of transmission.

From	To	Speech Transcription	Time <sup>3</sup>
Spitfire	FISO	Copied thanks	1516:00
		[Traffic calls to two other aircraft in the visual circuit]	
C172	FISO	[C172 C/S (clipped)] turning on to finals touch and go	
FISO	C172	[C172 C/S] er one aircraft ahead	1517:05
C172	FISO	[C172 C/S (clipped)]	
FISO	C172	AND [C172 C/S] touch and go your discretion surface wind two zero zero at eight knots	
C172	FISO	[C172 C/S (clipped)]	
		[No relevant transmissions]	1518:30
Spitfire	FISO	Spitfire holding short two four ready for departure	
FISO	Spitfire	And [Spitfire C/S] runway two four take off your discretion surface wind two two zero one zero knots	
Spitfire	FISO	[Spitfire C/S]	
C172	FISO	[C172 C/S] downwind touch and go	
FISO	C172	[C172 C/S] er roger report final runway two four	
C172	FISO	[C172 C/S]	
		[No relevant transmissions]	
Spitfire	FISO	Spitfire [C/S] rolling	
C172	FISO	[C172 C/S] turning finals touch and go	
FISO	C172	[C172 C/S] runway two four touch and go at your discretion surface wind two three zero seven knots	
C172	FISO	[C172 C/S]	
		[No relevant transmissions]	1523:30
C172	FISO	This is [C172 C/S] erm downwind er for touch and go	1527:20
FISO	C172	[C172 C/S] roger report final for runway two four this will have to be a full stop sir as we've got a display about to start at Goodwood House in three minutes	
C172	FISO	[C172 C/S] so I'm gonna land	
FISO	C172	[C172 C/S] roger	
Piper Cub	FISO	Er Goodwood [Piper Cub C/S]	
FISO	Piper Cub	[Piper Cub C/S] Goodwood pass your message	
Piper Cub	FISO	Er piper cub again er returning back to Goodwood er we're presently at er three thousand feet south of er Chichester er we copied the er display erm in the Goodwood House area so er we're ????? do know the maximum altitude that he's displaying at we hold overhead until he's finished	1528:30
FISO	Piper Cub	[Piper Cub C/S] standby the NOTAM states [momentary break in transmission] amsl to three thousand feet	
Spitfire	FISO	Maximum display height three thousand feet	1529:00
Unknown	Unknown	????? ????? maintaining altitude two thousand two hundred feet	
FISO		Yeah two people calling at once	
FISO	Piper Cub	And [Piper Cub C/S] er we got a report NOTAM it's not above three thousand feet	

From	To	Speech Transcription	Time <sup>3</sup>
Piper Cub	FISO	Er roger we'll climb to three thousand five hundred er we'll head towards the airfield and hold and then if you could advise us when the er display has finished	1529:30
FISO	Piper Cub	[Piper Cub C/S] will do	
Piper Cub	FISO	Thank you	
Spitfire	FISO	Er Spitfire from er	
Spitfire	FISO	Goodwood a Cessna's just er gone straight through the display site	1530:30
FISO	Spitfire	Spitfire do you say an aircraft's gone through your display site	
FISO	Spitfire	And Spitfire we got one aircraft on finals for two four	
Spitfire	FISO	And Spitfire's run in that aircraft has gone straight through the display site	
FISO	Spitfire	Spitfire roger that aircraft was in touch it was in circuit and he was on finals to land at thirteen thirty	1531:00
Spitfire	FISO	It's now thirteen thirty one	
[No further transmissions relevant to the Airprox]			

## Analysis and Investigation

### CAA ATSI

The incident occurred at 1530:39, 1.5nm northeast of Goodwood Airfield, within Class G airspace and within the Goodwood ATZ, between a Supermarine Spitfire and a Cessna 172. The Goodwood ATZ comprises a circle of radius 2nm, centred on the midpoint of runway 14R/32L and extending to a height of 2000ft above aerodrome level (elevation 110ft). ATSI had access to RTF recording from Goodwood, area radar recording and written reports from both pilots together with a written report from the Goodwood ATSU. The Goodwood RTF recording was voice activated and the time injection was estimated to be 4.5 minutes slow when matched to the area radar. An appropriate adjustment was made to the RTF time injection. Goodwood is promulgated as providing an AFIS within the published hours of operation. RW24 right hand traffic pattern was in use. The FISO workload was assessed as light.

The Spitfire pilot was operating under VFR, conducting a flying display at Goodwood House and was in receipt of an Aerodrome Flight Information Service (AFIS) from Goodwood Information on frequency 122.450MHz. The Civil Aviation Authority, pursuant to Rule 5(3)(b) of the Rules of the Air Regulations 2007, granted permission<sup>4</sup> for the Spitfire pilot, to fly within 500 feet of persons, vehicles, vessels or structures for the purpose of a private air display. Paragraph 2 (c)(vi) of the permission required the permission of Goodwood ATC before the Spitfire pilot could fly the display. In addition, NOTAM H4719/13 had been promulgated.

The C172 student pilot was in receipt of an AFIS from Goodwood Information on frequency 122.450MHz. The C172 pilot was operating under VFR in the visual right hand circuit on RW24, completing a fifth solo circuit, when the Goodwood FISO advised the pilot to make a full stop landing as the air display was due to commence.

At 1454:00, the C172 instructor advised the Goodwood FISO that the student was intending to complete 30min of solo circuit flying, and the C172 student pilot departed into the circuit at 1500.

At 1507:32, the Spitfire pilot called for engine start in readiness for the air display planned at 1530. At 1513:39, the FISO advised the Spitfire pilot of one aircraft operating in the circuit and

<sup>4</sup> A copy of the Permission is included at Annex A.

two inbound. This was acknowledged and the Spitfire pilot requested RW24 for departure and RW14 for arrival.

At 1515:35, the Spitfire pilot again reminded the FISO about the air display and the FISO acknowledged. At 1521:40, the Spitfire pilot reported rolling; after departure he routed to the north and departed the Goodwood ATZ.

The ATSU reported that, at 1523, the C172 student pilot became airborne for a last circuit with 7mins remaining prior to the planned air display. At 1527:30, radar showed the C172, 2.3nm west of the airfield and the Spitfire pilot manoeuvring 5.7nm north-northwest of the airfield. At 1528:50, an inbound aircraft requested details about the display with an intention to hold overhead at 3500ft until the display was complete. At 1530:00, the Spitfire pilot entered the ATZ from the northwest. The C172 pilot was on base leg 1.9nm northeast of the airfield, see Figure 1 below:

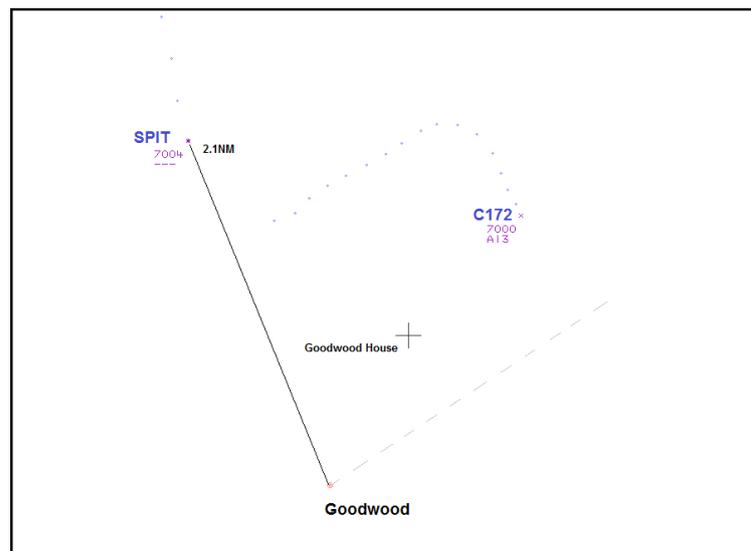


Figure 1: Swanwick MRT at 1530:00

At 1530:28, the Spitfire pilot was 0.5nm north-northeast of the airfield turning towards Goodwood House. The C172 pilot was turning onto final at 1.6nm, see Figure 2 below:

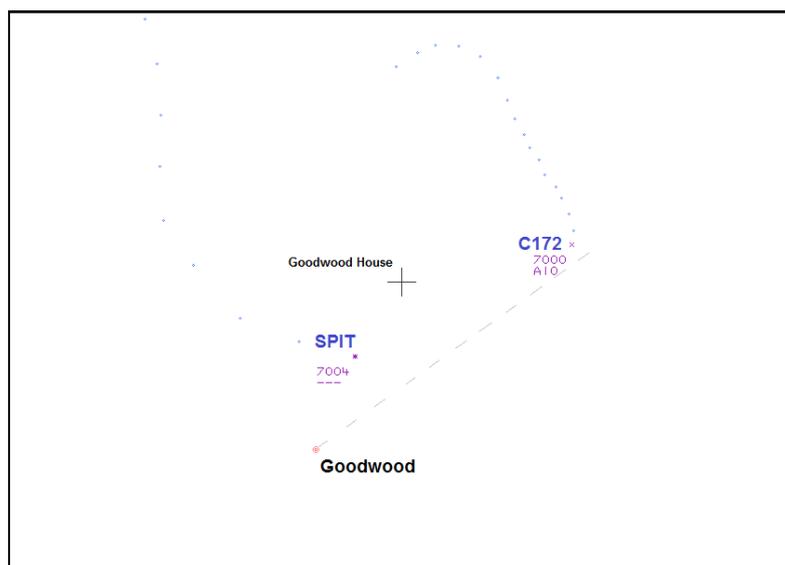


Figure 2: Swanwick MRT at 1530:28

The Spitfire and C172 continued to close on reciprocal tracks and at 1530:35 the lateral distance between the two aircraft was 0.4nm, see Figure 3 below:

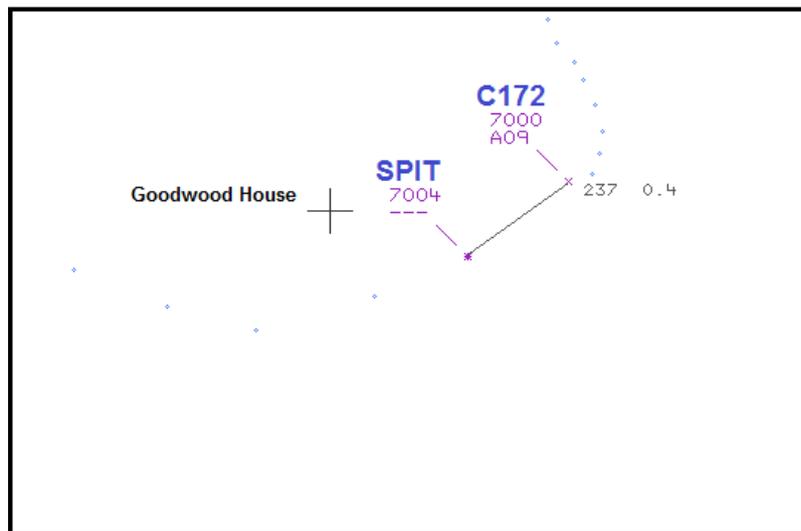


Figure 3: Swanwick MRT at 1530:35

The next sweep of the radar showed the Spitfire 0.1nm northwest of the C172 (CPA), as they passed abeam, see Figure 4 below:

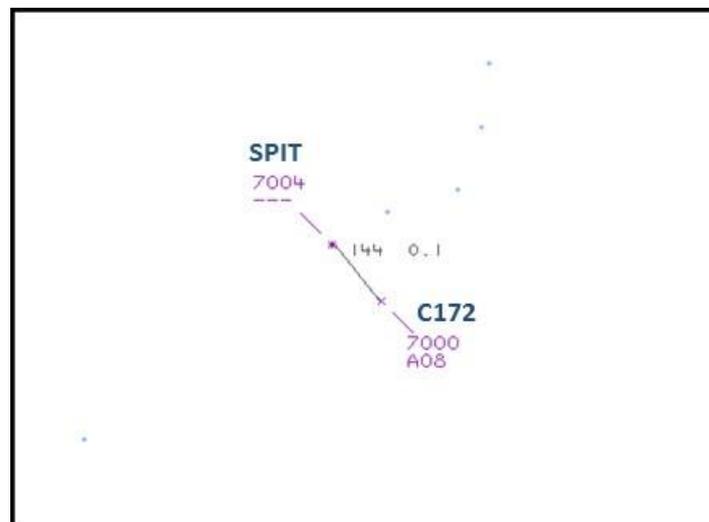


Figure 4: Swanwick MRT at 1530:40

The air display was planned and had been approved by the Goodwood ATSU. This was confirmed by the Spitfire pilot prior to departure and acknowledged by the FISO “...I’ll make sure there’s no circuit traffic at that time”.

With seven minutes remaining, the FISO likely judged that the C172 student pilot would be able to complete a final circuit. When the C172 pilot reported downwind the FISO gave him three minutes notice of the air display, advising him to land. At 1530, the C172 pilot was on final approach for RW24. The FISO did not attempt to call or warn the Spitfire pilot about the late landing of the C172 pilot. The FISO was likely unaware that the Spitfire pilot had re-entered the ATZ prior to running in. The RoA, Rule 45(4) states:

‘If the aerodrome has a flight information service unit the commander shall obtain information from the flight information service unit to enable the flight to be conducted safely within the zone.’

Goodwood approved the air display but no conditions were made regarding the requirement to call before commencing, completing or having the option to delay or cancel the display.

## UKAB Secretariat

Both pilots had equal responsibility for collision avoidance<sup>5</sup> and the Spitfire pilot was required to communicate his position and height to the FISO on entering the ATZ<sup>6</sup>.

## Comments

### Goodwood ATSU

The revised Goodwood procedure for display flying within the ATZ, in light of the ATSI report, is at Annex B.

## Summary

A Spitfire and a C172 flew into conflict at 1531 on 20<sup>th</sup> September 2013 in the Goodwood ATZ. Both pilots were operating under VFR in VMC, in receipt of an Aerodrome Flight Information Service from Goodwood Information. The Spitfire pilot was starting a display and the C172 pilot was in the visual circuit, on final to land.

## **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 video recordings, reports from the FISO involved, and reports from the appropriate ATC and operating authorities.

The Board first considered the actions of the C172 student pilot and his Instructor. The student had been authorised to complete '5 or 6' touch and go circuits by his Instructor, who had also briefed the FISO that his student would be completing 30min of circuit work. The Board considered that this plan was not sufficiently robust in that the student got airborne at 1500 and consequently was planned to be in the circuit at the same time as the display was due to start at 1530. The Board did not establish the Instructor's movements whilst his student was airborne, but it was apparent from the RT transcript that the student was allowed to continue in the circuit when an instruction to land from his Instructor would have been appropriate. Whilst the C172 pilot could reasonably be expected to display a degree of airmanship and captaincy, the Instructor was ultimately responsible for his actions and, as such, did not, in the Board's opinion, exercise sufficient supervision. In the event, the C172 student pilot saw the Spitfire 'as it passed beneath him' and hence too late to take avoiding action; effectively a non-sighting. The Board opined that the student's assessment of risk of collision as 'None' was a telling indication of his inexperience and understandable lack of appreciation of the situation.

Considering the Spitfire pilot's actions, the Board established that he had liaised effectively with the FISO before take-off and that both the FISO and the Spitfire pilot were aware of the correct display start time. The Spitfire pilot then ran-in with the expectation that the display area was clear but, critically, did not inform the FISO that he was doing so, was entering the ATZ or was approaching the display datum. The Board opined that the cumulative effect of the NOTAM, compliance with Goodwood pre-display arrangements and his RT conversation with the Piper Cub all contributed to his false expectation that everyone knew what he was doing and that the display area was clear. Once running-in, the pilot was understandably concentrating on positioning for the display datum, and consequently did not see the C172 until about 2sec before CPA, at the reported range and ground-speed.

Turning to the FISO, the Board noted that at times he was exercising a level of control that appeared not to be fully compliant with the privileges of his license; notably, he was providing a degree of control of aircraft in the air, such as the instruction to the C172 student pilot that he should land, which was beyond his remit. He also assured the Spitfire pilot that there would be 'no circuit traffic' at

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<sup>5</sup> Rules of the Air 2007 (as amended), Rule 8 (Avoiding aerial collisions)

<sup>6</sup> *ibid.*, Rule 45 (Flights within aerodrome traffic zones) (6)(c)

the display time, which served to create a false impression of what could be achieved. In his defence, the FISO had been issued with instructions for display procedures that contained requirements that a FISO could not be expected to put into effect under the terms of his license, such as the requirement to ensure the visual circuit was clear of traffic. These instructions would most likely have encouraged him to take actions that he should not have. Notwithstanding the fact that the Board has previously commented favourably on FISOs and A/G Operators issuing positive control instructions to pilots in the air in order to resolve Airprox incidents, the distinction between issuing instructions in an emergency situation and the planned control of operations is clear. In this case the Board opined that the combination of unsuitable display procedure instructions and the fact that the C172 was still in the visual circuit left the FISO in a position where his well-intentioned efforts at compliance resulted in a false expectation of control by both pilots and the airfield management. In the event, it was for the Airfield Manager, the C172 student's instructor and the Spitfire pilot (and to an extent the C172 student) to ensure that the display was able to be flown safely, not the FISO (although all members agreed that the FISO had an instrumental role to play in helping provide the required level of safety assurance). In this latter aspect, the C172 student pilot had been operating in the circuit for 30min prior to the Airprox, and the majority of Board members felt the FISO could reasonably have been expected to have been more proactive in passing traffic information on the impending display to the C172 pilot, and to the Spitfire pilot that the C172 was still in the circuit as 1530 approached. As a postscript, the Board noted the revised Goodwood document 'Procedure for Aircraft Display or Practice Display within the Goodwood ATZ'<sup>7</sup> and opined that it was flawed in 2 important aspects. Specifically, whilst a FISO can provide clear and unambiguous advice, a FISO is not licensed to instruct departing (once airborne) or arriving aircraft to be clear of the ATZ, and a FISO cannot ensure aircraft are clear of the Class G airspace of the surrounding area or the overhead. The Board concluded by reiterating the need for a clear understanding of the level of control that can be employed by a FISO, the requirement to write procedures that match, and the necessity to instigate further measures if more control was required.

After an extensive discussion, the Board eventually decided that the cause of the Airprox had been the Spitfire pilot not seeing the C172 until a very late stage, and the C172 student pilot effectively non-sighted to the Spitfire. The Board agreed that safety margins had been much reduced below normal. The Board were also hopeful that, in the light of this Airprox report, the Goodwood airfield management would reconsider the content of the document, 'Procedure for Aircraft Display or Practice Display within the Goodwood ATZ'.

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

<u>Cause:</u>	A late sighting by the Spitfire pilot, and effectively a non-sighting by the C172 pilot.
<u>Contributory Factors:</u>	<ol style="list-style-type: none"><li>1. The FISO was not sufficiently proactive in passing traffic information.</li><li>2. The Spitfire pilot did not notify the FISO on entering the ATZ as he ran in.</li><li>3. The C172 student pilot's instructor did not exercise sufficient supervision.</li></ol>
<u>Degree of Risk:</u>	B.
<u>ERC Score</u> <sup>8</sup> :	20

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<sup>7</sup> Reproduced at Annex B.

<sup>8</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.

**CIVIL AVIATION AUTHORITY**  
**Air Navigation Order 2009**  
**Rules of the Air Regulations 2007**

**PERMISSION – The 500 Feet Rule**

1. The Civil Aviation Authority, pursuant to Rule 5(3)(b) of the Rules of the Air Regulations 2007, as amended, hereby permits Spitfire G-ILDA (“the said aircraft”), to fly within 500 feet of persons, vehicles, vessels or structures for the purposes of a private air display.
2. This Permission is granted subject to the following conditions:
  - (a) the Pilot in Command of the said aircraft shall be listed in Boulton Schedule II;
  - (b) the said aircraft shall fly pursuant to this Permission only over the display line or area delineated on the attached Schedule I centred upon **Goodwood House**:

Grid reference: SU 883 089
  - (c) the said aircraft shall not fly pursuant to this Permission:
    - (i) unless meteorological conditions are such as to allow flight under Visual Flight Rules;
    - (ii) at less than **200 feet MSD** (See Note 1);
    - (iii) above any point on the surface closer to any area occupied by spectators or their vehicles than that specified in the attached Schedule II as appropriate to the display speed of the aircraft;
    - (iv) over any building or vessel which the commander of the aircraft has reason to believe is occupied by persons;
    - (v) unless that in the event of a failure of a power unit the aircraft can be landed without danger to persons or property on the surface;
    - (vi) **unless with the permission of Goodwood ATC**
  - (d) no military aircraft shall take part in a flying Display pursuant to this Permission without the prior approval of the Ministry of Defence.
  - (e) no persons other than minimum crew, as detailed in the aircraft C of A or Permit to fly, shall be carried on board unless the prior written permission of the CAA FOI(GA) has been obtained.
3. The breach in relation to any aircraft of any condition of this Permission shall render this Permission invalid for that aircraft but for no other aircraft during the continuance of the breach.
4. This Permission shall have effect **for a 10 minute period between 1530 - 1730 hours BST on 20 September 2013** unless previously revoked.

for Civil Aviation Authority

Date: 18 September 2013  
Reference: 20140310PAndE7201  
Flight Operations Inspectorate  
General Aviation  
01293 573510

Distribution: AUS, Police Air Support Unit; Jon Drake (07714 097868); ; Goodwood ATC; [File]

**Note 1: MSD (Minimum Separation Distance) - is the minimum separation, in all directions, between any part of an aircraft in flight and the ground, water or any obstacle.**

**Note 2: Pilots are reminded of the need at all times to minimise nuisance on account of noise, and to ensure that NOTAM action has been taken in respect of the proposed activity.**

**Enc: Schedule I & Schedule II**

**PROCEDURE FOR AIRCRAFT DISPLAY OR PRACTICE DISPLAY WITHIN THE GOODWOOD ATZ**

**AVIATION OPS MANAGER**

Authorises all flying displays and display practices

**FLYING SCHOOL**

Ensure planned aircraft movements do not conflict with the display.

**OPS**

Publicise display timings and ensure aircraft booking times do not conflict with the display. Display and highlight NOTAM, verbal reminder to visiting and departing pilots.

**FISOs**

Meet with the pilot and complete Goodwood Display: Memo of Understanding

Ensure NOTAM has been issued, or issue as requested on behalf of display pilot

Advise RFFS of display timings who will take Local Standby during the display

Ensure departing aircraft are aware of, and will be clear of the ATZ before display start. Aircraft may be instructed to hold on the ground, up to the holding point for the runway in use.

Ensure arriving aircraft are aware of the display, and remain clear of the ATZ and surrounding area (especially the overhead). All pilots calling for PPR are to be advised of the display timings.

Transmit to all stations (122.450) a 10 minute warning, sterile ATZ start, display start, display end, sterile ATZ end.

In the event of an aircraft infringing the ATZ, or flying in an area outside the ATZ but presenting a hazard to the display aircraft, the display aircraft is to be passed traffic information on the conflicting aircraft. The infringing aircraft is to be informed of the NOTAM'd display, the display aircrafts type and present position. If the infringing aircrafts callsign is unknown, blind transmissions are to be made.

**AIR/GROUND RADIO ONLY**

Meet with the pilot and complete Goodwood Display: Memo of Understanding

Ensure NOTAM has been issued, or issue as requested on behalf of display pilot

Advise RFFS of display timings who will take Local Standby during the display

Ensure departing aircraft are aware of, and will be clear of the ATZ before display start. An A/G RADIO operator may not instruct an aircraft on the ground to hold, but instead pass full details of the NOTAM'd display taking place to the pilot.

Ensure arriving aircraft are aware of the display, and remain clear of the ATZ and surrounding area (especially the overhead). All pilots calling for PPR are to be advised of the display timings.

Transmit to all stations (122.450) a 10 minute warning, sterile ATZ start, display start, display end, sterile ATZ end.

In the event of an aircraft infringing the ATZ, or flying in an area outside the ATZ but presenting a hazard to the display aircraft, the A/G operator is to exercise their Duty of Care by passing this information to the display pilot in the clearest and most unambiguous manner possible. The infringing aircraft is to be informed of the NOTAM'd display, the display aircrafts type and present position. If the infringing aircraft's callsign is unknown, blind transmissions are to be made.

**DISPLAY PILOT**

Meet the duty FISO on the day and complete Goodwood Air Display/Practice: Memo of Understanding

Pass additional RT calls to Goodwood Information advising:

- Leaving the ATZ
- Entering the ATZ
- Running in for the display
- Display Complete
- Or, Display Terminated along with reason and pilots intentions

All calls must be acknowledged by Goodwood Information.