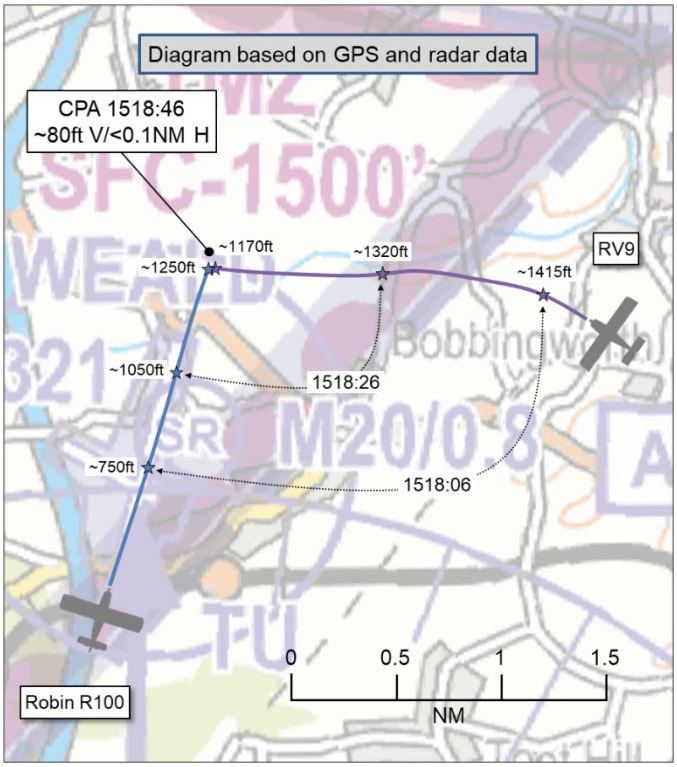
AIRPROX REPORT No 2025034

Date: 21 Mar 2025 Time: 1519Z Position: 5144N 00010E Location: IVO North Weald

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Robin R100	RV9
Operator	Civ FW	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	AGCS	AGCS
Provider	North Weald Radio	North Weald Radio
Altitude/FL	~1250ft	~1170ft
Transponder	A, C, S	A, C, S
Reported		
Colours	White, red	White, grey
Lighting	Strobes, landing	Strobes
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	1200ft	1200ft
Altimeter	QNH	QNH
Heading	020°	275°
Speed	80kt	120kt
ACAS/TAS	Not fitted	PilotAware
Alert	N/A	Information
Separation at CPA		
Reported	50ft V/0m H	100ft V/NR H
Recorded	~80ft V/<0.1NM H	



THE ROBIN R100 PILOT reports that [they had conducted] a go-around on RW02LH at North Weald airfield due to an occupied runway. They made the go-around decision early, which resulted in them being at 1200ft (circuit height) by the upwind end of the runway. They maintained 80kt (approximately) with flap-one and followed the published circuit. Just before the crosswind turn was to be made, their passenger shouted "*Traffic, right!*" and they were alerted to the RV9 on a collision course, 90° to their right. The [pilot of the RV9] had called inbound some time before but they are not sure of the timings.

No sooner had their passenger alerted them than the aircraft passed less than 50ft below. Their instant reaction, and possibly startled reaction, was a pitch-up action. This had no effect at that stage as the RV9 had passed by as they saw it. They were close enough that they could make out the heads of both pilots as they passed.

After the event, they proceeded to follow the correct published circuit, still at flap-one and on speed, to ensure separation, which concluded in an uneventful landing. After landing, they approached the RV9 pilot who [reportedly] advised them that they were 'heads in' at the time. [The Robin R100 pilot] later advised the airfield management and Air/Ground Radio Operator.

The pilot assessed the risk of collision as 'High'.

THE RV9 PILOT reports that they were joining North Weald from the east, and an inbound call was made to North Weald Radio when at 1500ft (QNH) at Willingale. RW02 was notified as being in use and, as has been their custom for many years, they positioned the aircraft to enter the circuit crosswind, north of the upwind end of RW02 and descended to 1200ft (QNH). They believe they made a crosswind call, as is their practice, though they cannot be absolutely certain. On approaching the crossing to the upwind centreline of RW02, they were briefly referring, with their passenger, to the depiction of the circuit pattern on the SkyDemon display when, returning their scan ahead and to the left, they saw (for the first time) the converging aircraft climbing out from their left. They had little time to respond and it

seemed that the other pilot had made late visual contact with [the RV9] as [it appeared that] they had taken sudden avoiding action by pulling up hard to cross above and slightly ahead of [the RV9].

[The pilot of the RV9 commented that,] as it may be suggested that they had not adopted the recently revised circuit joining procedure, they had recognised the new procedures as presented in January 2025 for joining the RW20 circuit, but had not seen the subsequent brief regarding the new procedure for arriving into the RW02 circuit from the east.

The pilot assessed the risk of collision as 'High'.

THE NORTH WEALD LEAD OPERATIONS OFFICER reports that they have spoken with the AGO. Nothing was said on the radio, nor seen by the AGO. North Weald unit was informed of the event after both pilots had landed.

Factual Background

An email, dated 25th March 2025, sent by the North Weald operations team in response to this Airprox, provided the following information to registered pilots:

> 'The January pilot brief outlined the revised safety and noise abatement procedures for joining runway 20. Further to this, the attached video is a reminder of the correct procedure for the crosswind join - runway 02'.

A representative from the North Weald operations team confirmed that there had not been a change to the procedure and that the email and video had been intended to serve as a reminder to pilots of the existing procedure.

Figure 1 – A screenshot from a video showing the correct procedure for joining from the east for RW02

The weather at Stansted was recorded as follows:

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METAR EGSS 211520Z AUTO 12016KT 9999 NCD 14/07 Q1005
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Analysis and Investigation

UKAB Secretariat

An analysis of the NATS radar replay was undertaken and both aircraft could be positively identified from Mode S data (Figure 2). The aircraft were depicted on the radar replay with altitudes based on 'radar QNH' of 1003hPa. These altitudes have been corrected with reference to the reported QNH from the nearest METAR station and have been shown as approximations in the diagram. The pilot

of the RV9 kindly supplied GPS track data for their flight. The diagram was constructed and the separation determined by combining the data sources.

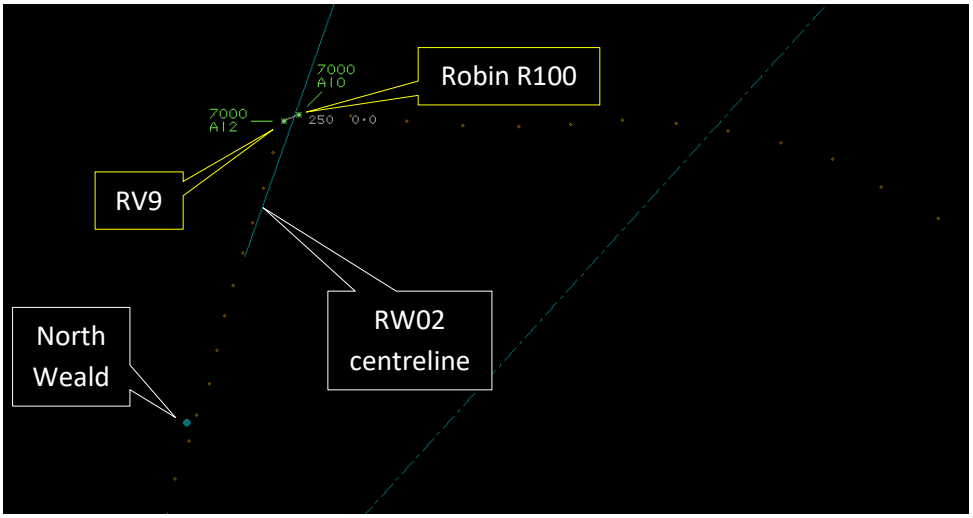


Figure 2 – CPA at 1518:46

The Robin R100 and RV9 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard.[1] An aircraft operated on or in the vicinity of an aerodrome shall conform with or avoid the pattern of traffic formed by other aircraft in operation.[2]

Summary

An Airprox was reported when a Robin R100 and an RV9 flew into proximity in the vicinity of North Weald at 1519Z on Friday 21st March 2025. Both pilots had been operating under VFR in VMC and in receipt of an AGCS from North Weald Radio.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings, GPS track data for the flight of the RV9 and a report from the North Weald Lead Operations Officer. Relevant contributory factors mentioned during the Board's discussions are highlighted within the text in bold, with the numbers referring to the Contributory Factors table displayed in Part C.

The Board first considered the actions of the pilot of the Robin R100. Members noted that they had heard the RV9 pilot transmit a call to say that they had been inbound to North Weald. Therefore, members agreed that the pilot of the Robin R100 had had generic situational awareness of the presence of the RV9 (**CF3**) but had not known its exact position until it had been visually acquired by their passenger. Members noted that the pilot of the Robin R100 had not had time to have taken avoiding action to have materially increased the separation. As such, it was agreed that it had, effectively, been a non-sighting (**CF6**). Members noted that the Robin R100 had not been fitted with an additional EC device which, on this occasion, may have provided a timely alert to the proximity of the RV9.

In consideration of the actions of the North Weald AGO, members agreed that they had not been required to have sequenced the traffic in the circuit and that it had been entirely the responsibility of the pilots involved to have conducted their respective flights safely.

Members next considered the actions of the pilot of the RV9 and pondered their position as they crossed from the deadside to the live side of the circuit. It was noted that the email and video sent by the North Weald operations team in response to this Airprox had explained that the correct procedure had been to cross the runway 'over the 20 numbers'. It was clear to members that the procedure had not changed

[1] (UK) SERA.3205 Proximity.
[2] (UK) SERA.3225 Operation on and in the Vicinity of an Aerodrome.

and that the email had intended to serve as a reminder to pilots. Members therefore agreed that the procedure had not been followed correctly. Members noted with surprise that the RV9 pilot had commented that crossing to the live side when "north of the upwind end of RW02" had been "their custom for many years". However, members concluded that this had not been a contributory factor in this incident. Members explained that the Robin R100 had already been approaching, or had already achieved, circuit height whilst still on the runway heading following their go-around. Consequently, the geometry of the Airprox 0.5NM north of the runway threshold may also have existed if the pilot of the RV9 had crossed the runway correctly over the RW20 'numbers'. Notwithstanding, members noted that the pilot of the RV9 had conferred with their passenger as they had approached the runway centreline and had not noticed that they had been converging with the Robin R100 to their left. Members wished to emphasise the imperative of maintaining a very thorough and effective lookout, particularly when joining the visual circuit, and to be certain that all circuit traffic has been identified before attempting to join the pattern.

Members agreed that the pilot of the RV9 had had generic situational awareness of the presence of the Robin R100 (**CF3**) and noted that the EC device fitted to the RV9 had provided information that may have assisted with their integration into the circuit (**CF4**). However, members agreed that the pilot of the RV9 had not acted on the information available to them and had been distracted at a critical moment (**CF5**). Members agreed that they had not avoided (nor conformed with) the pattern of traffic in operation (**CF2**) and, consequently, it was agreed that the pilot of the RV9 had not executed their join to the circuit correctly (**CF1**).

Members noted that the pilot of the RV9 had sighted the Robin R100 at the moment of CPA and had not had sufficient time to have taken avoiding action. Members agreed that that effectively constituted a non-sighting (**CF6**).

Concluding their discussion, members considered the risk of collision. It was agreed that neither pilot had sighted the other in time to have taken effective avoiding action and that the separation between the aircraft had reduced to the bare minimum. Members were in agreement that providence had played a major part in events and there had been a serious risk of collision (**CF7**). The Board assigned Risk Category A to this event.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2025034			
CF	**Factor**	**Description**	**ECCAIRS Amplification**	**UKAB Amplification**
	Flight Elements			
	• Tactical Planning and Execution			
1	Human Factors	• Action Performed Incorrectly	Events involving flight crew performing the selected action incorrectly	Incorrect or ineffective execution
2	Human Factors	• Monitoring of Environment	Events involving flight crew not to appropriately monitoring the environment	Did not avoid/conform with the pattern of traffic already formed
	• Situational Awareness of the Conflicting Aircraft and Action			
3	Contextual	• Situational Awareness and Sensory Events	Events involving a flight crew's awareness and perception of situations	Pilot had no, late, inaccurate or only generic, Situational Awareness
	• Electronic Warning System Operation and Compliance			
4	Contextual	• Other warning system operation	An event involving a genuine warning from an airborne system other than TCAS.	
	• See and Avoid			
5	Human Factors	• Distraction - Job Related	Events where flight crew are distracted for job related reasons	
6	Human Factors	• Monitoring of Other Aircraft	Events involving flight crew not fully monitoring another aircraft	Non-sighting or effectively a non-sighting by one or both pilots
	• Outcome Events			

7	Contextual	• Near Airborne Collision with Aircraft	An event involving a near collision by an aircraft with an aircraft, balloon, dirigible or other piloted air vehicles	

Degree of Risk: A.

Safety Barrier Assessment[3]

In assessing the effectiveness of the safety barriers associated with this incident, the Board concluded that the key factors had been that:

Ground Elements:

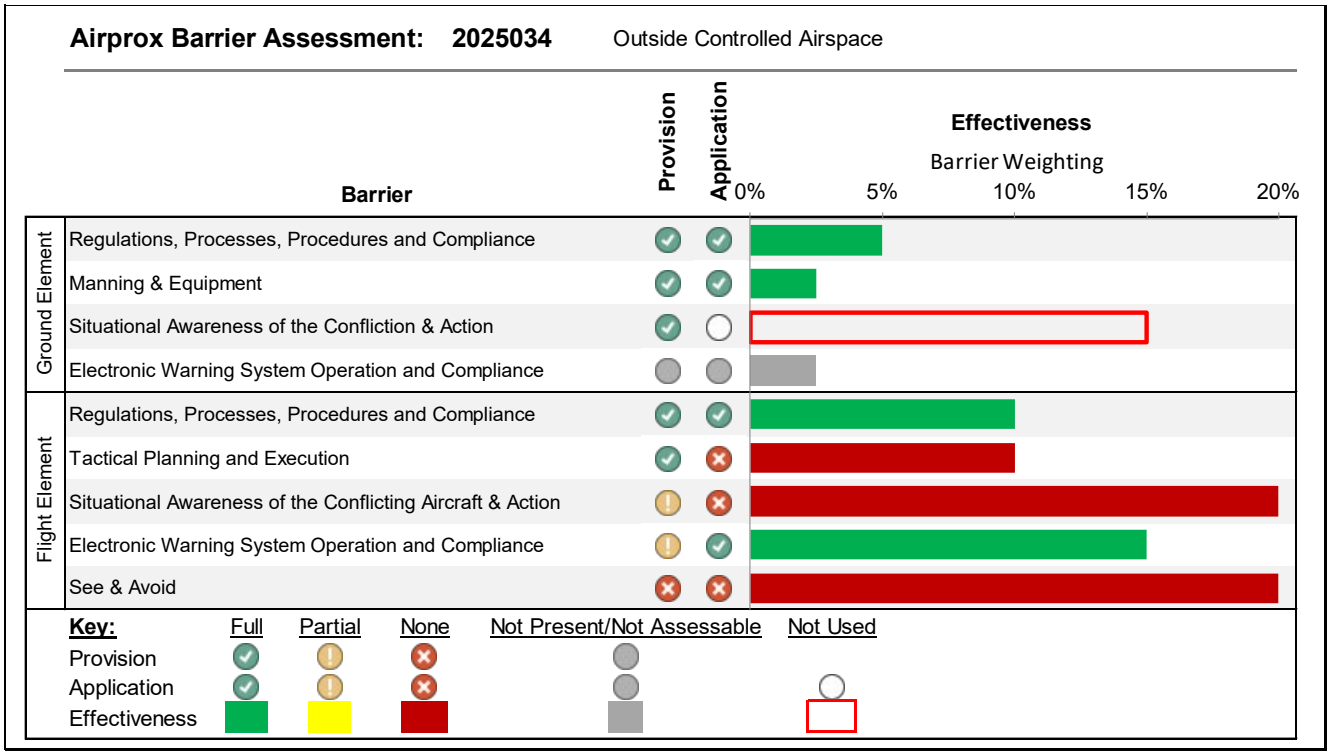
Situational Awareness of the Confliction and Action were assessed as **not used** because the North Weald AGO had not been required to have sequenced the traffic.

Flight Elements:

Tactical Planning and Execution was assessed as **ineffective** because the pilot of the RV9 had not conformed with, nor had effectively avoided, the pattern of traffic in operation.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because the pilot of the RV9 had not acted on the information provided by their EC device.

See and Avoid were assessed as **ineffective** because neither pilot had visually acquired the other aircraft in time to have taken effective avoiding action.



[3] The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the UKAB Website.