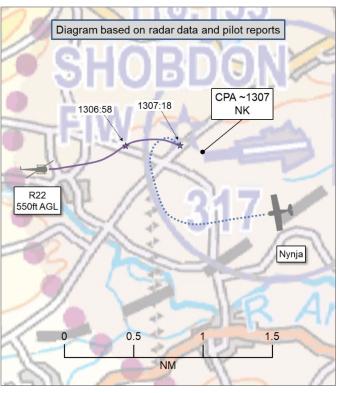
AIRPROX REPORT No 2025064

Date: 30 Apr 2025 Time: ~1307Z Position: 5214N 00254W Location: Shobdon ATZ

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2		
Aircraft	Nynja	R22		
Operator	Civ FW	Civ Helo		
Airspace	Shobdon ATZ	Shobdon ATZ		
Class	G	G		
Rules	VFR	VFR		
Service	AGCS	AGCS		
Provider	Shobdon Radio	Shobdon Radio		
Altitude/FL	NK	550ft AGL		
Transponder	Not fitted	A, C, S		
Reported				
Colours	White	Blue		
Lighting	Strobes, landing	Strobe		
Conditions	VMC	VMC		
Visibility	>10km	>10km		
Altitude/FL	300ft	350-400ft		
Altimeter	QFE (1012hPa)	QFE		
Heading	080°	080°		
Speed	55kt	Reducing 70-60kt		
ACAS/TAS	Not fitted	Not fitted		
Separation at CPA				
Reported	50ft V/10m H	50ft V/150m H		
Recorded	NK			



THE NYNJA PILOT reports that they were nearing the end of a 60min circuit detail with their student, in the microlight circuit for RW08 north grass-runway. There was no other circuit traffic at the time. Their student called "[Nynja C/S] *Downwind*, *08*, *north grass to land*". The radio operator replied "*Roger*". They were aware that a helicopter pilot, [in the R22], had requested to join long final but had yet to call 4-mile final. [The student in the Nynja] turned base for a half-mile final for RW08 north (grass), and they called "[Nynja C/S] *on base*" to let the 'tower' and helicopter traffic know their position. The helicopter pilot had not yet called 4-mile or 2-mile final and they did not have the helicopter in sight. The radio operator called [the R22 pilot] to inform them of the [Nynja's] position. The helicopter pilot said that they were "*visual with the aircraft*" so [the Nynja] was on their right about to turn final.

At 400ft, they started their descent (500fpm) and turned onto a half-mile final for RW08 north (grass runway). Their airspeed was 55kt. As they descended through 300ft, the helicopter flew directly underneath them with approximately 50ft vertical separation, on the same heading. Then, the helicopter pilot called final (for the first time) for RW08 north (grass) ahead of them. [The pilot of the Nynja] immediately instructed their student to climb and they called "[Nynja C/S] going round, the helicopter has cut in front". They repositioned in the circuit and then landed.

It would appear that, despite the helicopter pilot being told of their circuit position, having [reported visual with the Nynja] to their right turning final ahead for RW08 north (grass runway), they made no attempt to give way to the traffic on the right and overtook [the Nynja] 50ft below while they were descending for the same runway. Only when [the R22] had passed underneath [the Nynja] did [the R22 pilot] call "[R22 C/S] *final for 08 north grass*".

[The pilot of the Nynja] had no opportunity to speak to the pilot of [the R22] after the incident, but they reported the Airprox to the radio operator, airfield manager and acting ATSU manager.

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

THE R22 PILOT reports that they were in the process of final approach (that they had called on the radio) from a cross-country flight. They recall that the [pilot of the Nynja] had advised that they were downwind and had received an advisory of [the R22] on final approach. They had initial visual contact [with the Nynja] at that time. They continued their final approach to approximately the threshold and observed [the Nynja] again at their 4 o'clock, slightly higher on base leg undertaking a quite steep and unsmooth turn to starboard. They were marginally concerned and decided to create temporary extra separation. They did that by diverting to port for about 30-40m, and for approximately 15sec, then resumed their approach to RW08 (grass). They did not have visual contact with [the Nynja] after that. They did observe a definitive shadow passing over them from their 8 o'clock to 2 o'clock position. Seconds later, they experienced significant disturbed airflow which required corrective cyclic inputs to stabilise their aircraft. They did not have visual contact with [the Nynja] after that at any stage and continued their landing to the north-side RW08 grass runway.

[Referring to an annotated SkyDemon trace (Figure 1),] the red cross marks a deviation which they had initiated to allow more separation in case it was needed. The green cross indicates the position of the [Nynja] when they had first seen it on base leg. It was in a fairly steep starboard bank, approximately 100ft above them at their 4 o'clock position. They did not see the [Nynja] gain altitude or distance after that point. The yellow cross shows the approximate position [of the R22], about 75ft AGL and 100–150m inside the threshold, when the full shadow of the [Nynja] passed across the ground from their rear-left to front-right. Immediately following that, they experienced significant turbulence, or wake disturbance, which required immediate and firm corrective control inputs for 2–3sec. Initially, they assumed that it had been caused by a large gust of wind.

[In cooperation with the Shobdon Airfield Investigation, the pilot of the R22 confirmed that] they had visual contact with, and had heard radio communications confirming, the [Nynja] was on downwind. When asked [by the Shobdon AGO], they confirmed that they had visual contact [with the Nynja]. They made a 'long finals' call when 3–4 miles out and then called 'finals' again immediately after deviating. 'Tower' confirmed the wind velocity at that time. They are unsure how the [Nynja pilot] could have established priority from base leg when [the R22] was already established on final and clearly visible. In the same position, they would not have expected to cross the path of an aircraft on final approach, but, instead, would have extended downwind as No.2.

The [pilot of the Nynja] was informed of the [R22's] position during their downwind call, a minute or so after [the pilot of the R22] had made their long final call, so [the Nynja pilot] should have been aware of both their location and intentions. Furthermore, they do not understand [the Nynja's] track, from left of RW08 north-side grass, across the position [of the R22], to the right of the same runway, especially at such a relatively low altitude.

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

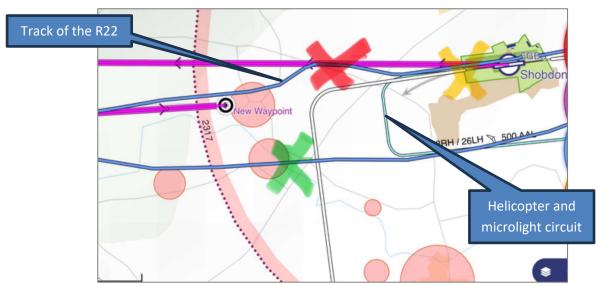


Figure 1 – The track of the R22 (blue)

THE SHOBDON AGO reports that [the pilot of the Nynja], an instructor with a student, was operating in the microlight circuit (RW08RH). [The pilot of the R22] was inbound from the west with one person on board.

[The pilot of the Nynja] reported downwind and, shortly afterwards, [the pilot of the R22] reported inbound from four miles to the west. Traffic Information was given by the AGO to [the pilot of the Nynja] and [the pilot of the R22] about each other. Shortly afterwards, the AGO saw [the R22] on an estimated long-final for the runway and reported this to [the pilot of the Nynja].

[The pilot of the Nynja] then reported right-base and [the pilot of the R22] confirmed that they were visual with [the Nynja]. [The pilot of the R22] then reported final and the AGO saw both aircraft on final, with [the Nynja] appearing to have been ahead. This information was given to [the pilot of the R22] and landing information was given to [the pilot of the Nynja].

[The pilot of the Nynja] then reported going-around and later reported to the AGO that this was because [the pilot of the R22] had "cut in front and underneath him". There was no call from [the pilot of the R22] entering the ATZ.

Factual Background

The entry for Shobdon aerodrome in the UK AIP provides the following diagram:

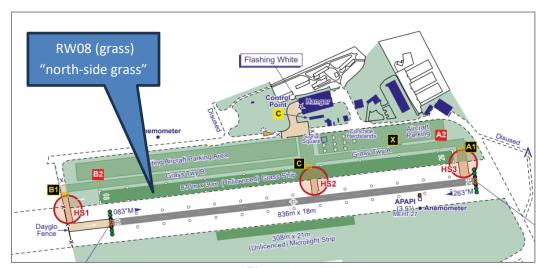


Figure 2

The weather at RAF Cosford and Gloucestershire Airport was recorded as follows:

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METAR EGWC 301320Z AUTO 12005KT //// /////// Q////
METAR EGBJ 301320Z 00000KT CAVOK 24/08 01021
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Analysis and Investigation

Shobdon Airfield Investigation

Background:

Air/Ground Service was in operation. Two staff were in the VCR, one recently validated A/G operator and one Air Traffic Service Assistant. There was no significant weather. Traffic levels throughout the day were predominately low with Temporary Operating Instructions in place: no visitors and circuits were restricted to training flights with instructors.

Statement from [the AGO]:

[The pilot of the R22] had called "4 miles to the west" which, effectively, was a long final for RW08. At that time, [the pilot of the Nynja] was mid-late downwind. There was no call upon joining the ATZ from [the pilot of the R22].

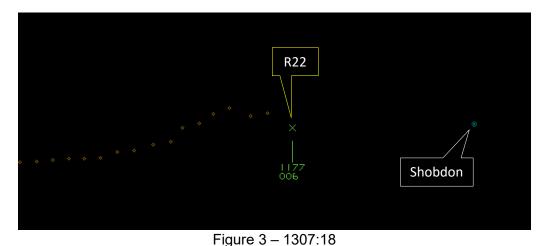
Traffic Information was passed to both pilots, saying to [the pilot of the Nynja]: "traffic is R22 believed to be on long final for 08 north grass runway". At that point, [the R22] was probably slightly closer than a long final, however, there was no report yet, only a visual observation. [The pilot of the R22] confirmed that they had copied the traffic and were looking out.

When [the Nynja] reached right base, 'tower' asked if [the pilot of the R22] had copied the traffic on right base. [The pilot of the R22] then reported visual with the traffic, however, both pilots decided to continue. Whilst [the pilot of the Nynja] never reported final and, potentially, could have extended (it is the opinion of the AGO that [the pilot of the R22] should have held and let [the Nynja] in after reporting visual, or stated that they were likely to be number 1). The Traffic Information was passed to both pilots with the intention of prompting them to organise themselves without passing instructions. As [the AGO] had seen the potential of both aircraft arriving on final at nearly the same time, they had tried to ensure the pilots knew about each other by making them confirm that they had copied the traffic.

[The pilot of the Nynja] did not report final for the whole situation and ended up going-around despite [the AGO] believing that they were ahead (from their angle). [The pilot of the R22] went under the [Nynja] and came in to land as [the pilot of the Nynja] went around. [The pilot of the R22] did, eventually, call final before the Airprox, however, they had already come into close proximity [with the Nynja] by then.

UKAB Secretariat

An analysis of the NATS radar replay was undertaken and the R22 could be positively identified from Mode S data (Figure 3). The Nynja was not observed on the replay. Neither aircraft could be observed by reference to ADS-B data sources.



The diagram was constructed from the radar data. The track of the Nynja could not be determined and has been shown as a dotted line to indicate its probable track. The separation at CPA could not be determined.

A review of the recorded RT was undertaken and the following pertinent transmissions were heard:

Shobdon AGO: [R22 C/S] Roger. we do have circuit traffic. We do have a Skyranger

operating in the microlight circuit.

Pilot of the R22: * unintelligible *

Pilot of the Nynja: [Nynja C/S] Downwind for 08 grass touch-and-go

Shobdon AGO: [Nynja C/S] We do have an R22 helicopter inbound last reported 4 west

for a straight-in approach for 08 north grass.

Pilot of the Nynja: Roger. Will keep a good **lookout?** [Nynja C/S].

Shobdon AGO: [Nynja C/S] The R22 helicopter appears to be on a long final for runway

08 north grass runway.

Pilot of the Nynja: Roger that. We're turning base. [Nynja C/S].

Shobdon AGO: [R22 C/S] Did you copy the traffic?

Pilot of the R22: Copied traffic. Have visual. [R22 C/S].

Pilot of the R22: [R22 C/S] Finals for 08 north side grass.

Shobdon AGO: [R22 C/S] Roger. One ahead is a Skyranger. Break. [Nynja C/S] Surface

wind 120 degrees less than 5.

Pilot of the Nynja: [Nynja C/S] We've just been cut up by the helicopter. Going around.

The Nynja and R22 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard. 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. When two or more heavier-than-air aircraft are approaching an aerodrome for the purpose of landing, aircraft at the higher level shall give way to aircraft at the lower level, but the latter shall not take advantage of this rule to cut in front of another which is in the final stages of an approach to land, or to overtake that aircraft.

Summary

An Airprox was reported when a Nynja and an R22 flew into proximity at Shobdon at approximately 1307Z on Wednesday 30th April 2025. Both pilots were operating under VFR in VMC and in receipt of an AGCS from Shobdon Radio.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, a report from the AGO, radar photographs/video recordings and a report from the airfield operator. 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 Nynja and members noted that they had been established in the circuit when the pilot of the R22 had first contacted the Shobdon AGO. It was noted that the Shobdon AGO had subsequently passed Traffic Information to the pilot of the Nynja: "We do have an R22 helicopter inbound last reported 4 west for a straight-in approach for 08 north grass" and the Nynja pilot had acknowledged. As the pilot of the Nynja had been positioned in the downwind leg at that time, members agreed that sufficient information on the R22 had been passed for them to have formed a mental model that the two aircraft had been likely to arrive at the same place at a similar time. However, it was agreed that that conflict information had not been assimilated (CF6) and that there had been no indication that the Nynja pilot's dynamic plan had been adapted to consider the approaching helicopter (CF2). It was further agreed that, having been passed Traffic Information on the R22 but not having acquired it visually, it may have been prudent to have requested additional information to have been certain of its position (CF5) before having continued their own approach to the runway. Indeed, members noted that the Traffic Information on the R22 had not been 'resolved' and were keen to emphasise that it had been imperative for the pilot of the Nynja to have looked left, along the final approach track, before turning from base leg to final. Members noted that the Nynja pilot had not made a call for final which may have assisted the pilot of the R22 with their integration into the pattern of traffic (CF1). Members agreed that the pilot of the Nynja had not sighted the R22 until it had passed

¹ (UK) SERA.3205 Proximity.

² (UK) SERA.3225 Operation on and in the Vicinity of an Aerodrome.

³ (UK) SERA.3210 (4)(i) Right of way.

underneath them and agreed that that effectively constituted a non-sighting (**CF7**). Notwithstanding, members commended the decision to have initiated a go-around.

The Board next considered the actions of the pilot of the R22 and members noted that they had informed the Shobdon AGO that they had intended to approach RW08 (grass runway) when they had been at a range of approximately 4NM from the field. However, members agreed that it had not been clear to the Shobdon AGO, nor to the pilot of the Nynja, how the R22 pilot had intended to integrate into the circuit pattern. That is, what their position in the sequence to land had been or where their 'final approach' had begun. Members agreed that the pilot of the R22 had not communicated their intentions effectively (for the benefit of the situational awareness of the AGO and Nynja pilot) (CF1). Members noted that the pilot of the R22 had sighted the Nynja when it had been on base-leg and had deviated from their track *"to allow more separation in case it was needed"*. Members agreed that the pilot of the R22 had lost visual contact with the Nynja at that point, but had previously been aware that it had been close enough to have warranted a deviation from their final approach track. Consequently, it was agreed that the R22 pilot's dynamic plan had not been adapted sufficiently to have met the needs of the situation (CF2). Members agreed that it had not been the case that the R22 had been so far ahead of the Nynja that the R22 pilot need not have considered it further and to have simply continued their approach. It was suggested that it may have been more appropriate to have made a decision much earlier in their approach and to have slowed down and to have positioned behind the Nynja or, if the separation had reduced unexpectedly during the latter stages, to have aborted their approach altogether. Members noted that the R22 pilot's call of 'final' had been late (relative to the base-leg of the circuit pattern) and had not assisted the pilot of the Nynja with their situational awareness. The R22 pilot had visually reacquired the Nynja after CPA, too late to have taken action to affect the outcome (CF7).

Turning their attention to the actions of the AGO, members noted that they had been aware of a potential confliction and had passed Traffic Information to both pilots on two occasions, and had prompted each pilot to acknowledge the position of the other aircraft. Members appreciated that, although the Shobdon AGO could not have advised a sequence to land, they had provided sufficient information to each pilot to have arranged their respective approaches. One member commended the overall passage of Traffic Information but suggested that a discrepancy in the information provided may have inadvertently introduced an element of doubt. On one hand, the AGO had repeated to the Nynja pilot the R22 pilot's declaration that they had been "on a long final" and the Nynja pilot may have inferred from that that the R22 had been ahead. However, on the other hand, the AGO had stated to the R22 pilot that "one ahead is a Skyranger". Nevertheless, members agreed that it had been for the pilots of both aircraft to have arranged the sequence for landing.

Concluding their discussion, members agreed that neither pilot had communicated their intentions effectively and that neither pilot had adapted their plan sufficiently to have met the needs of the unfolding situation. It was further agreed that, despite situational awareness of the other aircraft, neither pilot had arranged their integration adequately (CF4) and, consequently, neither pilot had conformed with (nor had avoided) the pattern of traffic (CF3). Although the exact separation at CPA could not be determined, members agreed that safety had not been assured and that there had been a risk of collision (CF8). The Board assigned Risk Category B to this event.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2025064					
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification		
	Flight Elements					
	• Tactical Planning and Execution					
1	Human Factors	Accuracy of Communication	Events involving flight crew using inaccurate communication - wrong or incomplete information provided	Ineffective communication of intentions		
2	Human Factors	Insufficient Decision/Plan	Events involving flight crew not making a sufficiently detailed decision or plan to meet the needs of the situation	Inadequate plan adaption		

3	Human Factors	 Monitoring of 	Events involving flight crew not to	Did not avoid/conform with the		
		Environment	appropriately monitoring the environment	pattern of traffic already formed		
	 Situational Awa 	Situational Awareness of the Conflicting Aircraft and Action				
4	Human Factors	Incomplete Action	Events involving flight crew performing a task but then not fully completing that task or action that they were intending to carry out	Pilot did not sufficiently integrate with the other aircraft despite Situational Awareness		
5	Human Factors	Lack of Communication	Events involving flight crew that did not communicate enough - not enough communication	Pilot did not request additional information		
6	Human Factors	Understanding/ Comprehension	Events involving flight crew that did not understand or comprehend a situation or instruction	Pilot did not assimilate conflict information		
	See and Avoid					
7	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					
8	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: B.

Safety Barrier Assessment⁴

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

Flight Elements:

Tactical Planning and Execution was assessed as **ineffective** because it had been for the pilots of both aircraft to have conformed with, or avoided, the pattern of traffic.

Situational Awareness of the Conflicting Aircraft and Action were assessed as partially effective because the pilot of the Nynja had not assimilated conflict information pertaining to the position of the R22.

See and Avoid were assessed as **ineffective** because the pilot of the Nynja had not sighted the R22 until CPA and the pilot of the R22 had lost visual contact with the Nynja in the moments leading to CPA.

⁴ The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the <u>UKAB Website</u>.

