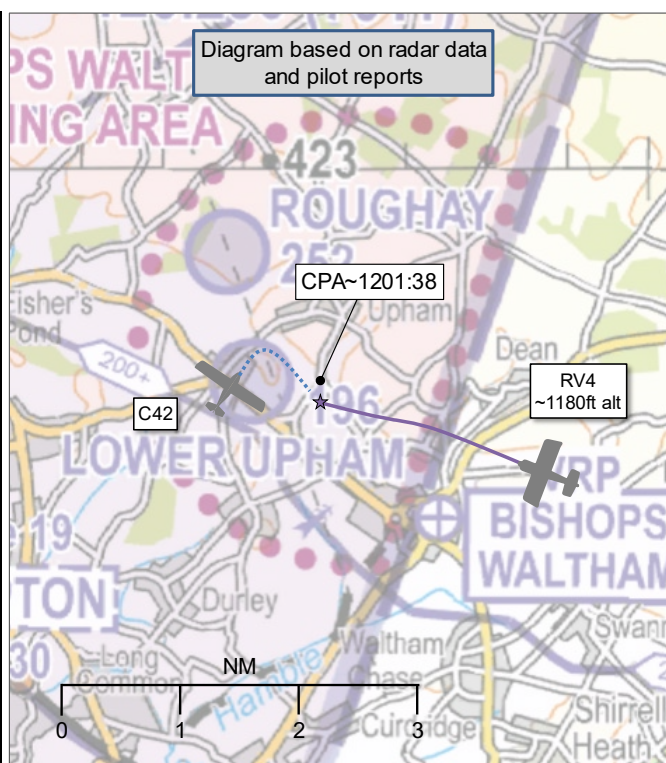


AIRPROX REPORT No 2025135

Date: 03 Jul 2025 Time: ~1202Z Position: 5058N 00113W Location: IVO Lower Upham

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	C42	RV4
Operator	Civ FW	Civ FW
Airspace	Southampton CTR	Southampton CTR
Class	D	D
Rules	VFR	VFR
Service	AGCS	Radar Control
Provider	Lower Upham	Solent Radar
Altitude/FL	NK	1180ft
Transponder	Not fitted	A, C, S
Reported		
Colours	White	White, Blue
Lighting	Strobe	Strobes, Nav
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	1055ft	1200ft
Altimeter	QNH	QNH
Heading	120°	280°
Speed	70kt	124kt
ACAS/TAS	SkyEcho	Not fitted
Alert	None	N/A
Separation at CPA		
Reported	100ft V/0m H	200ft V/20m H
Recorded	NK	



THE C42 PILOT reports that the aircraft is based at Lower Upham, a private site which is inside Southampton's CTR. On the 3rd of July 2025 at 1200, they departed on RW04 on a dual navigation exercise. Lower Upham has a letter of agreement [for pilots] to operate without talking to Southampton, and to enter and leave the CTR on Lower Upham's frequency of 123.050MHz. [Once airborne] they made an immediate right turn at 500ft (which is iaw normal operating procedure) after clearing the trees on the right at the end of the runway, and continued to climb to circuit height, which is 1300ft on the QNH, this is to remain under the Bishops Waltham Flying Area height of 1500ft, which is clearly shown on both the CAA chart and SkyDemon. On approaching the zone boundary, there was an aircraft inbound into Roughay Farm, which is 1NM NW of Lower Upham; this aircraft was showing on [their EC device] [non-Airprox aircraft C/S] as they entered the Southampton CTR at Corhampton Golf Course. They were aware that they would be passing 1NM apart so they made sure that they had sight of [the other aircraft] whilst the student continued the climb. It was at this point that they saw the approaching aircraft [the RV4] and it passed overhead at a very fast speed. On checking Flight Radar after landing, the speed was in excess of 215kt [they believed] and a height of approximately 1167ft (adjusting for the QNH). They made an urgent call both to Lower Upham and Solent Radar reporting an Airprox and then immediately returned to Lower Upham.

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

THE RV4 PILOT reports that they initially obtained a Basic Service from Solent Radar early, on passing and clear of Goodwood. They noted that ATC was busy due to an incident at Bournemouth and also there were a number of commercial departures. They were given a clearance to enter controlled airspace VFR and asked what type of join they wanted. They requested a visual left-base join for RW20. They began to reduce the power and make a gentle descent to manage the engine carefully and prevent shock cooling. They were warned the Bishops Waltham Flying Area was active. They were aware of a small rotary aircraft close to Bishops Waltham at a similar level to them so they routed just to the north

end of the town. They were aware that clearances to enter and depart Solent Class D [airspace] is usually via one of these waypoints so they usually do their best to be as close to them as possible. They entered controlled airspace on a direct heading to position for a visual left-base join, they were travelling at around 124kt and at 1200ft on the QNH. They had entered controlled airspace when they saw an Ikarus C42 microlight aircraft pass close and below their starboard engine cowl and wing leading edge. They estimated that the aircraft was about 200ft below and the brief snapshot that they had, indicated by the perceived angle of attack observed, suggested that the aircraft was either travelling at slow speed or climbing. At the time, their aircraft was operating Mode C/S transponder and has two extremely bright forward-facing lights on each wingtip, strobes on each wingtip and navigation lights illuminated. They did not see the Ikarus aircraft until it passed below. Whilst they accepted a VFR clearance and understand that it is their responsibility to look out for and avoid other aircraft, they were a little surprised not to have received any warning within the Class D airspace, they did not hear any RT to suggest the other pilot had been passed any information as to their own position and intention, though they did appreciate that the controller work loading was high. They noted that it was difficult for them to ascertain the collision level risk as they did not see the other aircraft until it passed close to and under their own.

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

A LOWER UPHAM REPRESENTATIVE reports that there is no tower at the airfield and the AGO position is conducted from an office where there is quite often more than one person around. As a consequence, it was not known who was on the radio at the time of the Airprox and no one could remember any details.

THE SOUTHAMPTON CONTROLLER reports that the RV4 was cleared to enter controlled airspace from the east of Southampton airport, positioning for VFR left-base join to RW20. A warning was passed about the Bishops Waltham Flying Area (BWFA) and the pilot instructed to report the airfield in sight. On transferring [the RV4 pilot] to the Tower frequency at 1201, a second warning was passed about the BWFA. At 1202 [C42 C/S] called on the radar frequency, advising they had been overflown on departure, by an aircraft inbound to the airport, by some 100ft. They asked for the details of the aircraft in question and they [the controller] advised that they would pass these over the telephone.

Factual Background

The weather at Southampton was recorded as follows:

METAR EGGH 031150Z 30005KT 230V010 CAVOK 21/08 Q1029=

UK AIP ENR 6-38

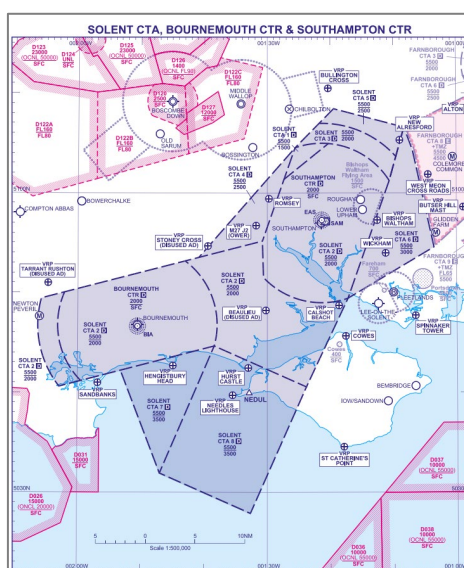


Figure 1

EGHI AD 2.17 AIR TRAFFIC SERVICES AIRSPACE

Designation and lateral limits	Vertical Limits	Airspace Class	ATS unit callsign/ language	Transition Altitude	Hours of applicability	Remarks
1	2	3	4	5	6	7
SOUTHAMPTON CTR 510459N 0012017W thence clockwise by the arc of a circle radius 8 NM centred on 505701N 0012124W to 510115N 0011039W - 504928N 0011714W thence clockwise by the arc of a circle radius 8 NM centred on 505701N 0012124W to 505133N 0013037W - 505512N 0013047W - 510123N 0012722W - 510459N 0012017W	Upper limit: 2000 FT ALT Lower limit: SFC	D	SOLENT RADAR English SOUTHAMPTON RADAR English	8000 FT		CTR contiguous with the Solent CTA. See ENR 2.1. Outside the Solent CTA notified hours of operation the Transition Altitude is 3000 FT. Aircraft given approval to enter or leave the CTR when en-route to, or departing from, any unlicensed aerodrome or landing site within the CTR, are to maintain a continuous listening watch on the appropriate ATC radio frequency. A change to 'SAFETYCOM' or other air/ground frequency is only permitted when specific approval has been given by ATC. To operate UAS above 400 FT AGL within this area, UAS operators are required to notify NATS via the NATS Non-Standard Flight (NSF) Portal. UAS operators are required to notify NATS at least 14 days before the date of each activity. Bishops Waltham Flying Area Provided that the following requirements are complied with, the provisions of SERA Section 4 Flight Plans and CAP 694 The UK Flight Planning Guide are deemed to have been met in respect of aircraft arriving and departing at unlicensed aerodromes Lower Upham (505817.00N 0011508.00W) or Roughay (505820.40N 0011513.20W), without a requirement to establish RTF contact with the ATS Unit specified at 4. Aircraft are to remain within the Bishops Waltham Flying Area (BWFA). Lateral limits of which are that part of the Southampton CTR within a circle radius 1.75 NM centred on 505839.60N 0011331.92W. Upper/lower limits 1500 FT ALT/SFC. Use of Lower Upham and Roughay aerodromes is subject to prior permission from the respective aerodrome operator. Such permission must have been received prior to commencement of a particular flight.

Figure 2

Analysis and Investigation

Southampton Occurrence Investigation

Executive summary

[RV4 C/S], inbound to land at Southampton, was cleared to enter controlled airspace from the east and join via left-base for RW20. They descended to circuit height (1000ft AGL/approximately 1100ft AMSL) as they entered the Southampton Control Zone (CTR) and passed through the Bishops Waltham Flying Area, which is active up to 1500ft. [C42 C/S] had recently departed Lower Upham airfield, inside the Bishops Waltham Flying Area, and was climbing and tracking towards Bishops Waltham. At approximately 1201, the two aircraft passed very close to each other to the north of Bishops Waltham, in opposite directions. Both flights continued, and [the C42 pilot] contacted Southampton ATC via radio to state that they intended to file an Airprox report.

Description of the event

The Airprox occurred at approximately 1201 at the northern edge of Bishops Waltham. A transcript including selected pertinent transmissions is detailed below. Note: a significant number of transmissions to unrelated aircraft were not included.

Transcript and Timeline of Events:

1154:17 (RV4) *Southampton good afternoon, [C/S] inbound X-ray 1029.*
 1154:22 [ATCO A] [RV4 C/S] *Solent radar hello, 1029 is correct, x is current it is a Basic Service squawk 3661 please.*
 1154:31 [RV4] *Er Basic Service. Was that 3661 for [RV4 C/S]?*
 1154:33 [ATCO A] *Affirm.*

At this time 3661 was seen on the radar display approximately 20NM east of Southampton at 2500ft.

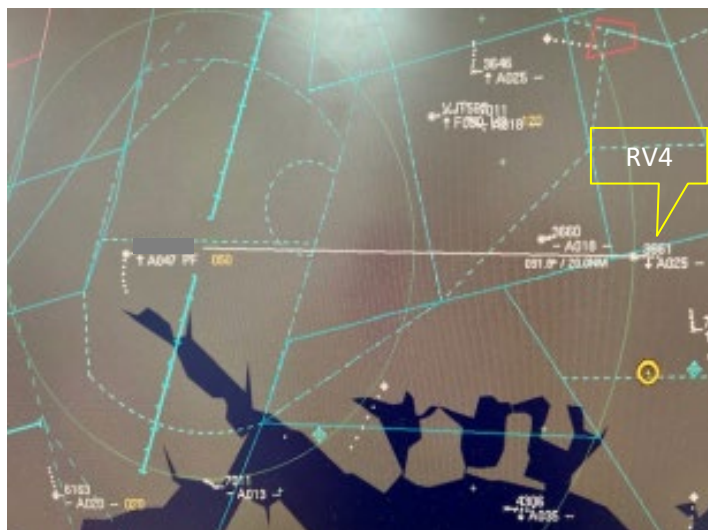


Figure 3

There followed a period of busy R/T involving a Bournemouth arrival and a Southampton departure. Bournemouth Approach was handling a priority inbound in an urgent state, potentially requiring [their arrival] to hold out at the BIA.

1155:15 [ATCO A] [RV4 C/S] *er what type of join would you like?*
 1155:17 [RV4] *Sorry you're readability of about 3 at the moment Sir, I'm just going to...just climb see if I can get a bit more clarity, standby.*
 1156:16 [ATCO A] [Full RV4 C/S], *Solent Radar, er what type of join would you like?*
 1156:22 [RV4] *I would like a visual left-base join please er for 20 er [C/S].*
 1156:27 [ATCO A] [RV4 C/S], *roger, if you route towards left base for 20, we will clear you in shortly, caution the Bishops Waltham Flying Area as you make that approach.*
 1156:36 [RV4] *That's err copied thank you, I will keep a...er...lookout.*

This was the first of 2 messages to the RV4 pilot, warning them of the presence of the Bishops Waltham Flying Area. [The RV4] was bearing 095° from Southampton, at a distance of 16.3NM and altitude of 2800ft (Figure 4).

1156:52 ATCO A began handover to ATCO B. Part-way through the handover, the phone was heard to be ringing but was ignored. Below is the part of the handover relating to the active traffic scenario.

1157:35 [ATCO A Handover] [unrelated C/S], *3660, to go to a site near Verwood just outside the Bournemouth zone has not cleared him through yet, [RV4 C/S], above him there, going to route towards left-base, have not cleared him in or passed any traffic, just on a basic service.*



Figure 4

[The departing aircraft] in the turn to NORRY had vacated controlled airspace.

1157:59 [ATCO A] [Departing aircraft c/s] *outside of controlled airspace, Traffic Service, Climb now FL070.*

1158:07 [Departing aircraft] *Climb now FL070, [C/S].*

1158:07 [ATCO A] *Er just confirm own navigation for NORRY?*

1158:11 [Departing aircraft] *Affirm, nav for NORRY [C/S].*

1158:11 [ATCO A] [Departing aircraft C/S] *if you can give me best rate, please through FL065.*

1158:21 [Departing aircraft] *Er wilco, [C/S].*

ATCO B prompted ATCO A to pass traffic [Information] on a primary contact to the departing aircraft. No further handover discussion.

[Departing aircraft] re-entered controlled airspace and was transferred to London Terminal Control.

It became apparent that the controller handover had been suspended and ATCO A had retained the Solent Radar position.

1159:56 [ATCO A] [RV4 C/S], *cleared to join controlled airspace, left-base join for runway 20, QNH of 1029.*

1200:04 [RV4] *Cleared to enter controlled airspace, 1029, er for left base 20, [C/S].*



Figure 5

ATCO A called Tower to pass information on [the RV4], a further aircraft was heard in the background.

12:00:13 [Tower] *Tower.*

12:00:14 [ATCO A] *Radar, sorry [Tower ATCO], erm on an [...], inbound. [RV4 C/S].*

12:00:19 [Tower] [RV4 C/S], *yep.*

12:00:21 [ATCO A] *Joining VFR left base for 02, has the airfield in sight, squawking 3661.*

12:00:26 [Tower] *3661 roger, thanks.*

At this point [the unrelated aircraft squawking] 3660 was approximately 7NM to the east of Southampton airfield indicating A017 having been cleared to transit controlled airspace not above altitude 2000ft VFR. [The RV4 squawking] 3661 was approximately 7NM east of Southampton airfield indicating A013 and 1.7NM due north of the other aircraft.



Figure 6

1200:50 [ATCO A] [RV4 C/S] *report the airfield in sight.*

1200:51 [RV4] *Airfield in sight, [C/S].*

1200:52 [ATCO A] *Roger.*

[The RV4] crossed the Southampton CTR boundary and entered controlled airspace at 1201:10, indicating 1100ft. There were no PSR or SSR contacts observed in the BWFA.



Figure 7

1201:05 Phone call from Bournemouth to co-ordinate [an aircraft] towards the BIA at A050.

1201:23 [ATCO A] [RV4 C/S], *entered controlled airspace, radar control, caution Bishops Waltham Flying Area.*

1201:28 [RV4] *Yeah errr, just seen that thank you, radar control, [C/S].*

There was no indicated significant deviation to the track of [the RV4] with no displayed PSR or SSR contacts within the Bishops Waltham Flying Area (BWFA).



Figure 8

1201:34 [ATCO A] [RV4 C/S] *you can contact Southampton tower now, 118.205, cheerio.*

1201:38 [RV4] *To the tower 118.205, many thanks, bye.*

1202:04 [C42] *Solent Radar, [C/S].*

1202:05 [ATCO A] [C42 C/S], *Solent Radar, hello.*

12:02:06 [C42] *Er we have just taken off from Lower Upham, we have just been overflown by an aircraft 100 feet above us on our climb out from Lower Upham.*

1202:12 [ATCO A] *Roger.*

When [the C42 pilot] reported that they had been overflown there were no visible primary or secondary radar returns to indicate that an aircraft was airborne in the BWFA.



Figure 9

1202:13 [C42] *And can you just er give us the registration number of the aircraft 'cause I will need to file an Airprox.*

1202:17 [ATCO A] [C42 C/S], *roger, I will pass those details back over the phone.*

Investigation

Information available to the investigation included:

- CA4114 from the Solent ATCO (NATS Ref No: OCC314185).
- CAA 1:250,000 and 1:500,000 charts.
- UK AIP.
- CAP 493 – MATS Part 1.
- Southampton MATS Part 2.

LOAs Immediate Actions Taken

- The LOA was suspended.
- ATCO A was debriefed.
- The ATS General Manager was informed.
- A safety survey was initiated.
- A full review of the LOA and safety analysis was commissioned with all stakeholders invited to contribute.
- The Airport Duty Manager was informed by ATCO B of the event by telephone at 1257.

Southampton Airport is situated inside controlled airspace, consisting of an Aerodrome Traffic Zone (ATZ) and Control Zone (CTR), both Class D [airspace], from the surface to 2000ft AMSL. Above this is the Solent Control Area (CTA) which is Class D [airspace] from 2000ft to 5500ft. The airspace is only active during the airport's hours of operation. Both VFR and IFR flights are permitted, while above 5500ft the airspace is Class A, with only IFR flights permitted and is permanently active (see UK AIP entry at Figure 1).

To the east of Southampton airport, inside the CTR, there are two unlicensed grass strips; Roughay Farm airfield and Lower Upham airfield, which predominantly operate VFR flights. The airfields are located close to the Bishops Waltham Visual Reference Point (VRP) which is used by aircraft [pilots] navigating with visual reference to the surface.

Aircraft [pilots] wishing to operate to or from an aerodrome inside Class D airspace require an ATC clearance before entering or departing into the airspace. To reduce controller and pilot workload, frequency congestion and the likelihood of an airspace infringement, NATS Southampton entered into a Letter of Agreement (LoA) with both Roughay Farm and Lower Upham, which details when the agreement is active and how each party will operate.

The agreement establishes a flying area (Bishops Waltham Flying Area) and removes the requirement for flights flying to/from Lower Upham and Roughay Farm to obtain a specific ATC clearance when operating in accordance with the LoA. There is no requirement for such flights to contact Solent Radar when airborne (although it is encouraged to monitor the frequency). Aircraft utilising the Bishops Waltham Flying Area must remain within the designated area, below 1500ft. Solent Radar will assume that the area is active during daylight hours and will have no knowledge of each individual movement.

ATC is not required to segregate the BWFA airspace, but is expected, when possible, to pass Traffic Information to aircraft routeing through the BWFA.

ATCO A:

ATCO A described the workload at the time of the Airprox as medium to high, which increased when a Southampton departure unintentionally left controlled airspace. There was an unusual situation at Bournemouth with an emergency aircraft potentially leading to a blocked runway. There was also a non-deviating flight leading to increased co-ordination during the session. ATCO A was working as Southampton Approach and Solent Radar combined, with no co-ordinator and they could not recall

if a radar co-ordinator was rostered or available at the time. ATCO A described how there were a number of VFR transits during the session and could recall passing Traffic Information to [the RV4 pilot] on helicopter traffic to the south of them. ATCO A could also recall warning [the pilot] about the presence of the BWFA.

1245 – After the incident, ATCO B telephoned [the flying school], Lower Upham to get details reference [the C42]. Relevant excerpts of the telephone call are contained below:

1246:55 [Flying school rep] *Right. Just trying to clarify because obviously I've got 2 extreme...you know when they said 100ft they have been checking and they seem to reckon it was no more than 50ft. He was literally 140kts or whatever he was.*

1247:08 [ATCO B] *Yeah.*

1247:10 [Flying school rep] *And they reckon it was 50ft, if that, above them.*

1247:12 [ATCO B] *Ok.*

1247:13 [Flying school rep] *It was...they almo...he almost hit the tail it was...cause they were climbing and they...it was...they were just over they were about 1060ft or something, and he went above them at just under 1100.*

[Flying school rep] confirmed the pilot intended to report an Airprox and the call ended at 1249:09.

[The pilot of the RV4] was interviewed via telephone on 30th July 2025 – the details of which are summarised below:

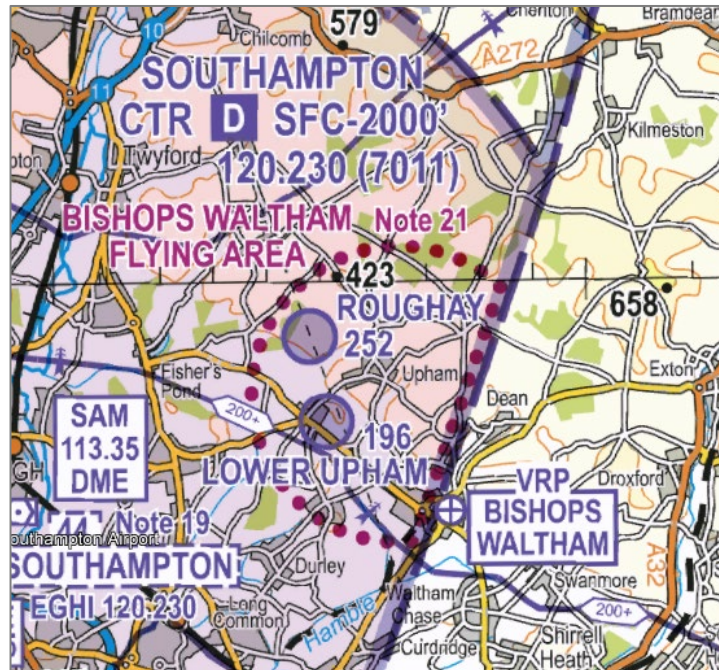
[The RV4 pilot] normally operates VFR when flying into Southampton. They tend to plan to route via a VRP when entering and leaving controlled airspace as they feel that it makes it easier for ATC and removes any ambiguity from their route.

They use SkyDemon for VFR flight planning and described that the software shows the CTR as Class D airspace from the surface to 2000ft, in a light magenta colour. Inside the CTR there is a semi-circle shape outlined with a dotted line, stating surface to 1500ft, but no other information. The pilot was aware of the existence of the Bishops Waltham Flying Area but was unclear on what the actual activity in that area is and assumed that aircraft operating to and from the area were subject to the permission and knowledge of ATC. In their experience elsewhere, they have to telephone the parent airfield for an ATC clearance to depart controlled airspace.

They mentioned that, in hindsight, if they had more knowledge of the activity in the Bishops Waltham Flying Area and/or an alternative VRP, that they would have considered a different route. [On this trip] they selected the frequency for Solent Radar, selected the frequency monitoring code of 7011 and listened to the Southampton ATIS. On contacting Solent Radar for an entry clearance, they advised [the controller] that they would like a visual approach to left-base for RW20. They mentioned that a straight line from [redacted] towards left-base for RW20 took them directly over Bishops Waltham VRP and they recall being told that the BWFA was active. They were aware that the Radar frequency was quite busy and could hear that the ATCO workload was high with a runway event at Bournemouth and an [...] departure. As they approached controlled airspace they were monitoring a rotary aircraft on their left-hand-side as they descended to circuit height, approximately 1100ft-1200ft and adjusted to a more appropriate speed for base-leg. They estimated that they came into close proximity with the C42 10-20sec after entering controlled airspace and they could not recall if they had been advised of a change of ATC service to Radar Control Service at that point.

They described that the C42 aircraft came quite close, in the opposite direction. They only caught a glimpse of it as it passed below them and they were unable to take any action because they did not see it until it was passing below their engine nacelle. They estimated that they were 150ft-200ft apart vertically, and that they believed the C42 passed their starboard side by 20m with a high angle of attack which suggested that they were climbing. They considered that it was hard to say if there was a risk of collision, but that they did not see the other aircraft and had no clue that someone may be climbing from below them when they were around 1min from reaching left-base.

Following the interview, the investigation focused on how the BWFA is notified to airspace users, and examples were obtained from the following common sources of information for pilots: this included information contained with the UK AIP (Figure 1 and 2) together with en-route charts and CAA VFR charts.



21. BISHOPS WALTHAM FLYING AREA. Aircraft arriving or departing at Roughay or Lower Upham without a requirement to establish RTF contact with SOLENT RADAR or SOUTHAMPTON RADAR are to remain within the area. See UK AIP AD 2.EGHI.

Figure 10 – CAA VFR Chart 1:250,000

It was noted that SkyDemon flight planning navigation software depicted the BWFA as:



Figure 11

BWFA Letter Of Agreement (LoA)

Lower Upham LoA – 1/2/2025, reviewed every 2 years for safety and applicability.

The relevant excerpts of the BWFA and Lower Upham LoAs are detailed below:

2. DESCRIPTION OF AIRSPACE

Lower Upham Airfield is situated approximately 3.7nms, 078° from Southampton Airport. The airspace in the immediate vicinity of Lower Upham airfield is designated as the Southampton CTR which extends from the surface to an altitude of 2000ft. The notified airspace is published in UK AIP AD2, EGHI-8 paragraph 2.17 column 6 ('Remarks'). The lateral limits of the Bishops Waltham Flying Area (BWFA) are defined as that part of the Southampton CTR within a circle radius 1.75NM centred on 505839.60N 0011331.92W. Upper/lower limits 1500FT ALT/SFC. Aircraft departing Lower Upham are to depart on an easterly track to the Southampton CTR boundary, not above 1500 feet under VFR within the notified Airspace as defined in Annex A. Aircraft are not to overfly the VRP Bishops Waltham. There is no requirement for pilots to coordinate departures with Solent Radar prior to departure. Aircraft intending to arrive at Lower Upham are to position from the East not above 1500 feet VFR within the notified airspace as defined in Annex A. Aircraft are not to overfly the VRP Bishop's Waltham. There is no requirement for pilots to coordinate their arrival with Solent Radar.

Annexe A

A.1 Map of the Airspace

The notified airspace is published in UK AIP AD2, EGHI-8 paragraph 2.17 column 6 ('Remarks'). The lateral limits of the Bishops Waltham Flying Area (BWFA) are defined as that part of the Southampton CTR within a circle radius 1.75NM centred on 505839.60N 0011331.92W. Upper/lower limits 1500FT ALT/SFC

A.2 Procedures

Procedures outlined in this Letter of Agreement are applicable between the hours of sunrise and sunset 365 days a year (366 days for a leap year), during notified hours of operation of the Southampton Control Zone. (Class D airspace)

OUTBOUNDS FROM LOWER UPHAM AIRFIELD

Aircraft departing Lower Upham are to depart on an easterly track to the Southampton CTR boundary, not above 1500 feet under VFR within the notified Airspace. Aircraft are not to overfly the VRP Bishops Waltham. There is no requirement for pilots to coordinate departures with Solent Radar prior to departure. Aircraft wishing to depart Lower Upham by any route other than that contained within the delegated airspace must telephone NATS Southampton on 02380 625875 to obtain clearance prior to departure.

MATS Part 2, Section 4 edition 1/25 effective: 25/04/2025 3.14 VFR

Operations in the CTR

Letters of Agreement are in operation between the Unit and the operators of Lower Upham and Roughay unlicensed aerodromes. Subject to compliance with LOA conditions, including remaining within the Bishops Waltham Flying Area (BWFA), aircraft may operate within the CTR without the requirement to establish RTF contact with Southampton ATC.

The BWFA is defined as that part of the CTR within a circle radius 1.75 NM centred on 5058.39.60N 0011331.92W, from surface level to 1500 FT ALT. It operates:

- during hours of CTR operation between sunrise and sunset; and
- the pilots must operate VFR; and
- the PSR is operational. Pilots are responsible for compliance with the operating requirements.

The Watch Manager/SCOD is responsible for notifying Lower Upham and Roughay when the PSR is unserviceable and suspending operation of the BWFA.

Radar unserviceability is to be notified on the ATIS. Lower Upham and Roughay are to be notified when the radar is serviceable and the BWFA is restored.

Aircraft intending to depart other unlicensed aerodromes/landing sites in the CTR, or Lower Upham/Roughay when the BWFA is not in operation, or intending to enter the CTR from the BWFA, are to telephone APP (02380 625875) to obtain a clearance.

Aircraft intending to land at unlicensed aerodromes/landing sites in the CTR, or at Lower Upham/Roughay when the BWFA is not in operation, or intending to enter the CTR outside the BWFA, are to establish contact APP for entry clearance.

APP is to pass generic traffic information to aircraft operating in the CTR, or in vicinity to it, if operating in or adjacent to the BWFA.

(Note: This was carried out, with generic Traffic Information passed twice to the pilot of [RV4 C/S].)

Conclusions

The Airprox occurred when [the pilot of the RV4] flew through the BWFA below 1500ft resulting in [the RV4] and [the C42] passing close to each other in the BWFA. Both aircraft were inside controlled airspace, [the RV4 pilot] was in receipt of a Radar Control Service from Solent Radar, but [the C42 pilot] was operating in accordance with the LoA and therefore was not in receipt of any service and ATC had no specific knowledge of the flight. There was no primary radar return, nor any secondary radar return from [the C42] and therefore it is not possible to measure the closest point between the aircraft, although it was estimated by [the C42 pilot] to be 50ft and by [the RV4 pilot] to be 150ft-200ft. During a later phone call with ATCO B, it was suggested that it was almost a collision. The situation resolved when the aircraft passed clear of each other.

The co-location of a VRP with a flying area could lead to the concentration of traffic in a particular location (Bishops Waltham). The LoA requires BWFA traffic to avoid overflying Bishops Waltham to reduce the likelihood of conflict with aircraft navigating via the VRP. However, as this incident occurred at the northern edge of Bishops Waltham, neither aircraft was contravening standard practice. [The RV4 pilot] commented that, had they known more about the activity in the BWFA, their approach would have been different, and if a more suitable VRP was available then they would potentially have utilised it. [The RV4 pilot] was focused on searching for helicopter traffic on their left-hand side which was diverging and did not see the C42 until it was passing close to them. Due to unfamiliarity with the activity in the BWFA, [the RV4 pilot] incorrectly believed that upon entering controlled airspace and receiving a Radar Control Service, that any Traffic Information would be advised to them by the ATCO. The arrival and departure phases of flight are known to be the busiest phases of flight for pilots and therefore the Airprox occurred during a time of increased workload for both the arriving pilot [the RV4] and departing pilot(s) [the C42]. It is understood that [the C42] was also a student and instructor which could potentially introduce an increased workload and/or distraction in the cockpit. The detail given by [the flying school] during the phone call with ATCO C regarding what the pilot can/can't see on departure is an indication that the workload can be high, with a requirement to maintain a significant lookout as well as manage the aircraft during the departure and climb phases of flight.

ATCO A mentioned the existence of the BWFA to [the RV4 pilot] on two separate occasions using the phraseology "*Caution the Bishops Waltham Flying Area*". This particular phraseology informed the pilot of the nature of the activity in the BWFA, without any indication of specific traffic activity, but on neither occasion did the pilot query the BWFA activity either which, as they stated during their interview, they were not entirely sure of. ATCO A referred to a medium-high workload and a departure unintentionally leaving controlled airspace. There was also an unusual situation at Bournemouth regarding an aircraft potentially blocking their runway and a flight of non-deviating status which required increased co-ordination against other traffic. It is likely that this traffic scenario took up a lot of capacity for the ATCO. The ATC clearance issued to [the RV4 pilot] was incomplete, lacking any height restriction. However, this omission was not cited by [the pilot] as a contributing factor for descent to circuit height. A routine VFR entry clearance would normally include a level restriction of 'not above 2000ft', but this was omitted by ATCO A. Given that VFR traffic is generally not required to maintain a specific altitude, and the standard VFR clearance permits flight up to 2000ft, had [the RV4 pilot] assumed their clearance was 'not above altitude 2000ft', they would still have had the flexibility to fly above the BWFA if they so wished. Therefore, the absence of an altitude restriction in the ATC clearance is not considered to have been a contributing factor to the incident.

The fading secondary radar return noted on [the RV4] is likely due to the aircraft's altitude and range from the secondary radar head. Southampton SSR is provided from Pease Pottage, near Gatwick, and therefore the performance is limited at low level and particularly to the west of the airfield. Often, as radar contacts descend to low level, the secondary radar return can start to fade and/or jitter. As part of the LoA, aircraft operating in the BWFA are expected to turn off their transponder in order to avoid any issues with 'nuisance' TCAS alerts for IFR aircraft operating nearby, and 'nuisance' airspace infringement warning (AIW) alarms on the radar console. Therefore, it is unlikely that SSR performance had an impact on situational awareness as it would be expected that aircraft in the vicinity would have their transponder in standby mode until leaving controlled airspace. The immediate actions taken to suspend and review the LoA were an appropriate response to the incident, to allow time to identify whether the LoA is still appropriate. The LoA was in place in order to reduce controller and pilot workload, given the number of movements in the BWFA. This is the first significant event in a number of years and the standard of adherence to the LoA is known across the unit to be high, with no recent airspace infringements.

Actions already taken

- The Letter of Agreement was reviewed to assess what, if any, changes were required which would prevent a similar occurrence in the future.
- The ATCO phraseology regarding BWFA and associated Traffic Information was reviewed to mitigate any pilot misunderstanding of the flying area activity.

UKAB Secretariat

An analysis of the NATS radar replay was undertaken and the RV4 could be identified using Mode S data. The RV4 had an indicated ground speed of 126kt and an altitude of FL007 (Southampton QNH was 1029hPa, therefore an approximate altitude of around 1130ft), see Figure 12. The C42 could not be seen on the radar, nor could it be seen on the CAA's airspace analysis tool, or any other open-source ADS-B tracking sites. Therefore, the exact separation between the two aircraft could not be ascertained.

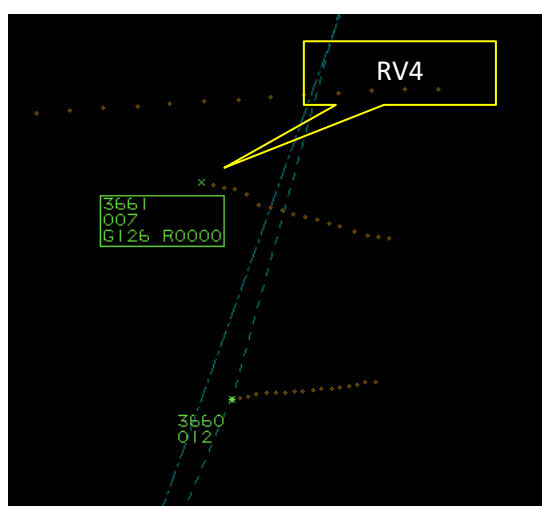


Figure 12 – 1201:38

The C42 and RV4 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

¹ (UK) SERA.3205 Proximity.

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

Summary

An Airprox was reported when a C42 and a RV4 flew into proximity in the vicinity of Lower Upham at around 1202Z on Thursday 3rd July 2025. The C42 pilot was operating under VFR in VMC not in receipt of an FIS, and the RV4 pilot was operating under VFR in VMC in receipt of a Radar Control Service from Solent Radar.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings, a report from the air traffic controller involved and reports from the appropriate operating authorities. 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 looked at the actions of the C42 pilot. They had taken-off from Lower Upham and had conformed to the conditions as contained within the LoA with Southampton Airport. The LoA stated that pilots did not need to call Solent Radar for any form of clearance through the Bishops Waltham Flying Area when departing Lower Upham, and so the C42 pilot had not been on the Solent Radar frequency. The RV4 had not been equipped with ADS-B and so the Board agreed that the CWS on the C42 could not have detected the RV4 (**CF8**). Without an alert from their CWS, or any information from ATC, members agreed that the C42 pilot had not received any prior situational awareness that the RV4 had been approaching the area (**CF7**). The C42 pilot described having seen the RV4 as it approached and flew overhead, which members judged to have been effectively a non-sighting by the C42 pilot (**CF9**).

Turning to the RV4 pilot, the Board heard that they had been approaching Southampton via the Bishops Waltham VRP and, in line with CAA guidance, had not routed directly overhead but, because they had also been concerned by helicopter traffic to the south of them, had routed north of the VRP. The RV4 pilot reported that they had assumed that the clearance to enter controlled airspace had meant that ATC would have deconflicted them from any traffic, however, the pilot had not been aware of the details of the LoA and the specifics of the BWFA. Although the controller had warned the pilot that the BWFA had been ahead of them, the controller had not provided any other details and so the RV4 pilot had not been aware of the potential activity within the area when considering whether or not to fly above it. However, members noted that Lower Upham had been marked on the VFR charts and thought that, even with the clearance to enter CAS from ATC, the RV4 pilot should have avoided overflying the airfield at circuit height (**CF4**, **CF6**). The RV4 pilot had not received any Traffic Information from the controller about the presence of the C42 and had not been fitted with any form of CWS, so members agreed that the pilot had not had any prior situational awareness that the C42 had been in the vicinity (**CF7**). The RV4 pilot described seeing the C42 at the last moment and so, again, members agreed that this had been effectively a non-sighting (**CF9**).

The Board then discussed the actions of the Southampton controller. Members agreed that the controller had been busy with other traffic leading up to the time of the Airprox. ATC members noted that the aircraft that had unexpectedly routed outside controlled airspace would have increased the controller's workload exponentially and that there had been still further distractions with the incident at Bournemouth (**CF1**) and, as such, the controller had probably had little extra capacity to deal with the VFR traffic inbound. Nevertheless, members thought it had been unfortunate that the controller had not noticed that the RV4 pilot had been flying at a level that would take them into the BWFA and so had not been able to issue a warning. The controller had not had any information that the C42 had climbed out of Lower Upham, a radio call had not been required and the C42 had not been fitted with a transponder and had not displayed on the radar, and so members agreed that the controller could not have provided specific Traffic information to the RV4 pilot (**CF2**).

Members then discussed the procedures pertaining to the LoA and the BWFA. They noted that, although there was information about the BWFA in the AIP and on VFR charts, this all alluded to the rules regarding aircraft taking off from Lower Upham and Roughay; there was no information provided for transiting pilots that detailed what they can expect regarding aircraft operating within the BWFA and

under the auspices of the LOA (**CF3, CF5**). Furthermore, although the controller had warned the RV4 pilot about the BWFA, and it appeared to members that this had been normal procedures for Solent controllers, for a visiting pilot, only providing information that the BWFA was ahead, did not give pilots any indication about what they needed to do with that information. A visiting pilot would be unlikely to know that aircraft operating within the flying area were unknown to the controller and that Traffic Information would not be forthcoming.

Members were therefore heartened to hear that, during their review of the LoA, Southampton and key stakeholders had made amendments to include increasing the phraseology employed by ATCOs to warn pilots about the details of the BWFA, to segregate IFR traffic from the BWFA and to state within the LoA that the airspace is not segregated and that there may be aircraft transiting. Additionally, Southampton ATC has issued guidance to controllers that, unless operationally necessary, best endeavours will be exercised by Solent/Southampton Radar to not permit aircraft under their control to operate within the BWFA. Where practicable, endeavours will be made to contact Lower Upham Airfield to advise of any aircraft under the control of Solent/Southampton Radar that may be operating with the BWFA and that, where there is a requirement for the Solent/Southampton ATCO to pass Traffic Information to pilots in the BWFA, this Traffic Information must include a warning that the aircraft within the BWFA do not operate on the Solent/Southampton frequency and operate up to 1500ft.

When determining the risk of this Airprox, the Board considered the reports from both pilots together with that of the controller. For this Airprox, the C42 had not displayed on the NATS radars and so the exact separation could not be determined, however, members noted that neither pilot had been visual with the other aircraft prior to becoming visual at more or less CPA and that neither had taken any avoiding action. Therefore, members judged that providence had played a major part in the event and that a serious risk of collision had existed (**CF10**), Risk Category A.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2025135			
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification
	Ground Elements			
	• Situational Awareness and Action			
1	Human Factors	• Task Monitoring	Events involving an individual or a crew/team not appropriately monitoring their performance of a task	Controller engaged in other tasks
2	Contextual	• Traffic Management Information Action	An event involving traffic management information actions	The ground element had only generic, late, no or inaccurate Situational Awareness
	Flight Elements			
	• Regulations, Processes, Procedures and Compliance			
3	Organisational	• Flight Operations Documentation and Publications	Flight Operations Documentation and Publications	Inadequate regulations or procedures
4	Human Factors	• Use of policy/Procedures	Events involving the use of the relevant policy or procedures by flight crew	Regulations and/or procedures not complied with
	• Tactical Planning and Execution			
5	Organisational	• Flight Planning Information Sources	An event involving incorrect flight planning sources during the preparation for a flight.	
6	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			
7	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			

8	Technical	• ACAS/TCAS System Failure	An event involving the system which provides information to determine aircraft position and is primarily independent of ground installations	Incompatible CWS equipment
• See and Avoid				
9	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				
10	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 Assessment³

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 **ineffective** because the controller did not have any situational awareness that the C42 had been airborne and had been very busy with other traffic on frequency.

Flight Elements:

Regulations, Processes, Procedures and Compliance were assessed as **partially effective** because there was not enough published information on the BWFA for transiting pilots.

Tactical Planning and Execution were assessed as **ineffective** because the flight planning sources did not contain enough information for pilots transiting the BWFA. Furthermore, the RV4 pilot had planned to fly a direct track to base-leg, taking them through the Lower Upham circuit at or around circuit height.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because neither pilot had any situational awareness that the other aircraft had been in the vicinity.

Electronic Warning System Operation and Compliance were assessed as **ineffective** because the electronic conspicuity equipment on the C42 could not detect the RV4.

See and Avoid were assessed as **ineffective** because neither pilot saw the other aircraft in time to take 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](#).

Airprox Barrier Assessment: 2025135		Within Controlled Airspace				
Barrier		Provision	Application	Effectiveness		
				Barrier Weighting		
				0%	5%	10% 15% 20%
Ground Element	Regulations, Processes, Procedures and Compliance	✓	✓	20%		
	Manning & Equipment	✓	✓	15%		
	Situational Awareness of the Confliction & Action	✗	✓	15%		
	Electronic Warning System Operation and Compliance	●	●	10%		
Flight Element	Regulations, Processes, Procedures and Compliance	!	!	5%		
	Tactical Planning and Execution	!	✗	5%		
	Situational Awareness of the Conflicting Aircraft & Action	✗	✓	10%		
	Electronic Warning System Operation and Compliance	✗	✓	15%		
	See & Avoid	✗	✗	5%		
Key:		Full	Partial	None	Not Present/Not Assessable	Not Used
Provision		✓	!	✗	●	
Application		✓	!	✗	●	○
Effectiveness		■	■	■	■	■