

BRITISH MODEL FLYING ASSOCIATION

The Radio Control (RC) Achievement Scheme Test Standards Guidance



PART 1: BMFA TESTS GUIDANCE

PART 2: CAMERA DRONE - CERTIFICATE OF COMPETENCE

PART 3: TEST FORM

This document covers all the aircraft and exercise specifics and requirements for the above highlighted BMFA Achievement Scheme test.

This document is suitable guidance for:

Candidates, Examiners and Instructors

2026 issue



ABOUT THIS DOCUMENT:

This document contains the practical test details for the discipline listed on the cover and lists the requirements specific to the individual test as such.

The practical and theory exercises listed in this document must be completed in the numbered order, however the candidate is not expected to memorise this list, nor does it need to be performed as a schedule.

Candidates should read 'PART 1: BMFA TESTS GUIDANCE' before this document as it contains critical information applicable to ALL tests.

The 'PART 3: TEST FORM' is primarily for examiner use, however a comparable exercise list can be found at the end of this document, as it can be a great check sheet for candidates to track their practice progression.



IMPORTANT - CHECK THIS IS THE CURRENT VERSION:

It is important to appreciate that ALL the scheme documents are reviewed and updated on an annual basis. Whichever document you are using, you will know if you have the right one, simply by looking at the date on the front cover. If it's not dated with the current year, it is the wrong one!



EXAMINER DISCRETION AND FLYING LAWFULLY:

An examiner reserves the right to refuse to undertake this test if they believe any proposed flight/s cannot be completed safely, and/or lawfully, either as a result of the candidate's actions or the flying location.

It is the candidate's responsibility to fly lawfully. Therefore, they must demonstrate to the examiner compliance with UK Operator ID and UK Flyer ID laws before taking this test.



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Aircraft Requirements



General.

A camera drone for the benefit of this test is defined as a multirotor aircraft designed primarily for aerial photography, or aerial video capture, that is assisted by 'smart electronics', i.e. the aircraft is self-stabilising, and GPS assisted.

There is **NO** minimum size, and/or minimum weight for the test. However, candidates are reminded that no adjustment may be made to the test standards to suit the aircraft's size, ability, and/or weight.

NOTE: In order to take this test, the aircraft must be capable of performing a safe and controlled 'return to home' landing.

Gyro and smart electronics.

The use of a gyro, smart electronics and GPS is required for this test, and it will not be possible to complete all the test exercises without them.

The use of any automated (or autonomous) features that can influence the control of the aircraft, such as collision sensors or automated waypoint mission programming is **NOT** permitted. If such systems cannot be turned off, the aircraft may still be used, however the examiner must fail the candidate if any such system is seen to make corrective action during the flight.

CERTIFICATE REQUIREMENTS:

The aircraft must be a 'camera drone'.

NOT PERMITTED:

Automated control, i.e. waypoints.
Autonomous control, i.e. collision sensors.



EXAMINER DISCRETION:

An examiner reserves the right to refuse the use of an aircraft for a test if they do not deem it suitable or safe for the purposes of taking the test.

Location and Direction Requirements



General.

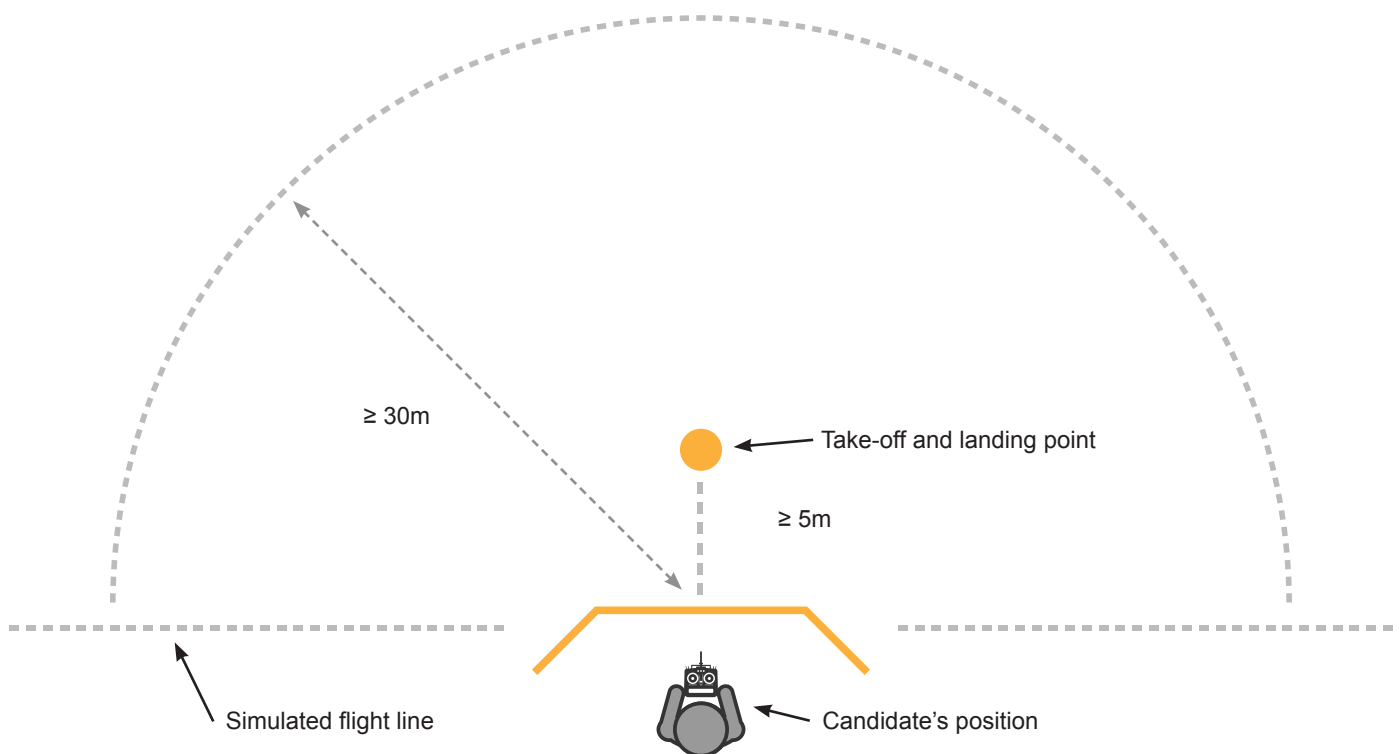
This test requires hovering and manoeuvring over and around referenced points, as well as minimum distances. Although not mandatory, it can be beneficial to set out cones, or other such marking points, for this purpose. It is also permitted to use such reference markers during the test itself.



Direction requirements.

This test has some exercises which must be performed in given directions or under directional instruction from the examiner.

Below is a diagram of referenced points applicable to this test.



NOTE: The distance between the candidate and the take-off and landing point must be a minimum of 5m but may be more at the candidate's choice.



STOP:

**Before continuing, have you read
'PART 1: BMFA TESTS GUIDANCE' ?**

This test must be undertaken by following the Achievement Scheme guidelines which are detailed in the PART 1 document.

Failure to adhere to the guidelines will result in any test being deemed null and void, regardless of the outcome.



EXAMINER REQUIREMENTS:

This test may be examined by any current BMFA registered examiner.

Test Exercises - Practical



NOTE: The following items must be completed in the numbered order, however the candidate is not expected to memorise this list, nor does it need to be performed as a schedule.

1. Carry out pre-flight checks.

The candidate must demonstrate their preparation for a 'safe flight', as if it is the very first flight of the day at a new location. This must cover and include:

- » Risk assessing the safety and legality of the proposed flight/s using 'SWEETS' as detailed in the BMFA Member's Handbook.
- » Preparing their aircraft using pre-flight checks as detailed in the BMFA Member's Handbook.
- » Ensuring their aircraft is handled in a safe manner.

NOTE: Overall, the candidate is expected to demonstrate how they have come to the decision that it is both 'legal' and 'safe to fly'.

The examiner will look to assess that the candidate has:

- » A steady and regular routine of checks.
- » Appropriately assessed the lawfulness and safety risk of their flight.
- » Appropriately checked and prepared their aircraft for flight.
- » Assessed potential impact on others in the area, for example radio frequencies.
- » Operated within local site, and/or club rules.
- » Operated in a generally safe manner, for example when powering on, and/or starting any motor.

NOTE: The candidate must ensure that their aircraft's failsafe is appropriately set during their pre-flight checks, so that it is ready for the return to home test in exercise 7. This must also ensure an appropriate and legal return to home height is set.



IMPORTANT:

If the candidate does NOT check their failsafe settings are correctly set before taking-off, then the test MUST be considered an instant failure.



2. Point-to-point.

The candidate must take-off and climb to a hovering height of approximately 10ft (i.e. slightly above head height) over the take-off point, and check the aircraft's flight controls by means of small nudges in each flight direction to confirm the controls are aligned to the multirotor's compass, and then hover in position over the take-off and landing point for about 10 seconds.

The candidate must then climb to a safe height of their choice (a safe height is one that is deemed sufficient to clear any obstacles in the flying area and maintain visual line of sight) and transition across three (3) points on the site selected by the examiner, before then returning to the take-off and landing point. The selected points should utilise identifiable site features or reference points on the horizon, alternatively some form of markers (such as cones) may be used.

Once back over the take-off and landing point, the aircraft should be turned tail-in, hovered for about 5 seconds and then landed.

Throughout the exercise the aircraft must be facing the direction of travel. The candidate should be expected to be able to track a straight path from point-to-point and only make minor adjustments to heading if necessary. The candidate should be expected to maintain a reasonably consistent height above the take-off and landing point (this allows for uneven sites on hills).

NOTE: The examiner must select the three (3) points and agree them with the candidate in advance of taking-off. All three (3) points must be a minimum of 30m away from the take-off and landing area, at least 20m apart from each other, and within a safe flying area (i.e. not beyond visual line of site, or close to any objects). There is no particular pattern that should be created by the three (3) points.

The examiner will look to assess that the candidate has:

- » Checked it is safe to enter the designated take-off and landing area with their aircraft and called their intent to do so.
- » Checked it is safe to take-off and land and called their intent to do so.
- » Climbed from take-off in a reasonably smooth manner.
- » Checked the aircraft's flight controls in a safe and controlled manner above head height, and only continued if satisfied that the aircraft is responding correctly.
- » Held the aircraft in a steady hover without undue oscillation at each stop point.
- » Climbed to a height that enables safe transition to each point as necessary.
- » Transitioned between each point in a reasonably straight line with a forward heading.

NOTE: The candidate is not expected to time the 10 or 5 second stops (the examiner should time each stop and say when to progress).

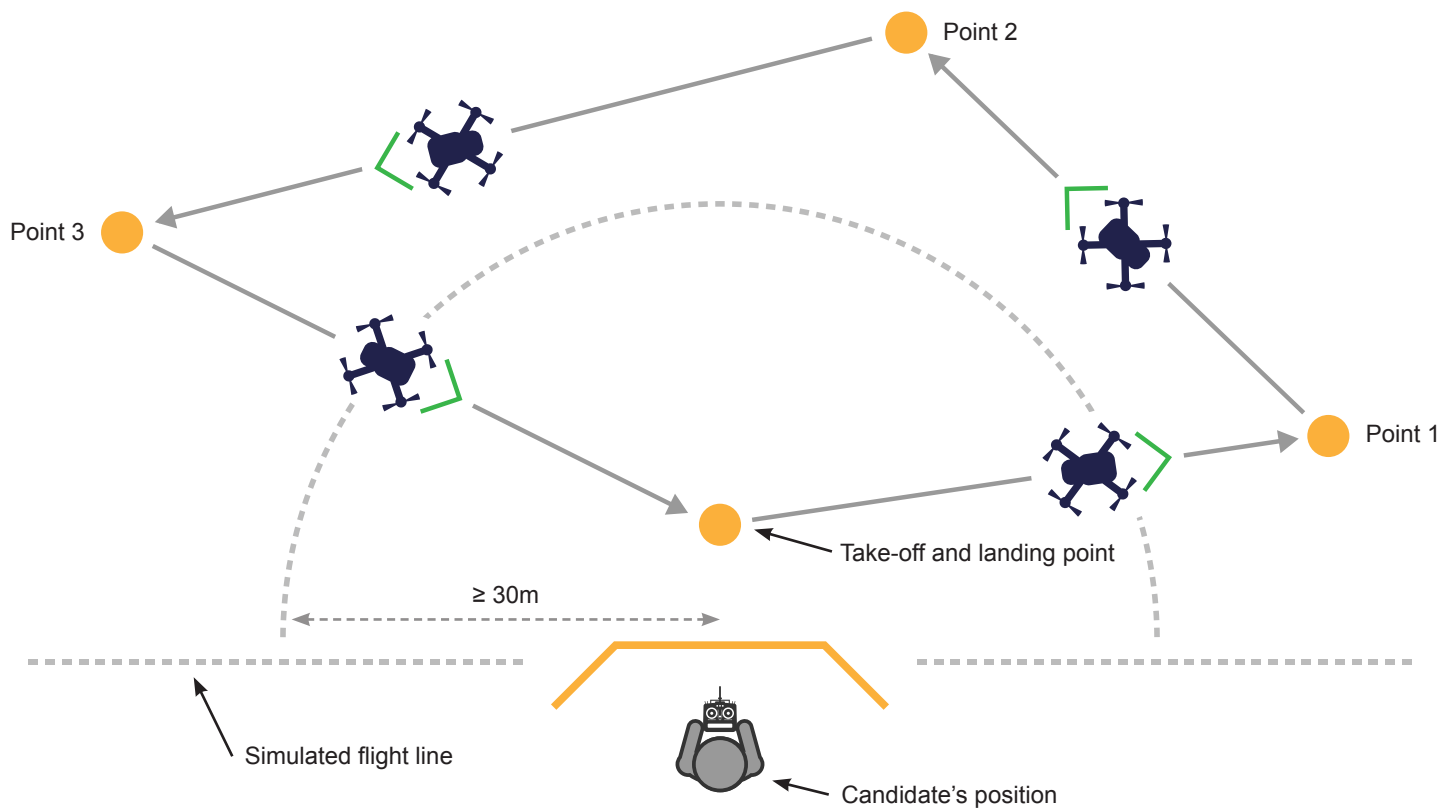
At the end of the exercise and if safe to do so the aircraft may be left armed and ready to fly in the take-off and landing position ready for exercise 3.

Test Exercises - Practical

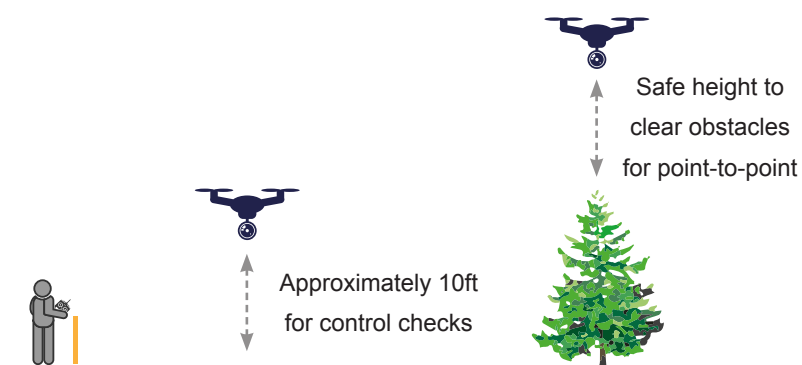


Location of exercise in flight area:

Example: 3 random points outside of the 30m radius from the candidate



Height of exercise above the ground:





3. Rectangular circuit 'into wind'.

The candidate must take-off and climb to a safe height of their choice (a safe height is one that is deemed sufficient to clear any obstacles in the flying area and maintain visual line of sight), then move forwards about 5m, before then turning 90° to either the left or right and fly a rectangular circuit starting 'into wind'.

NOTE: Although wind direction for a camera drone is not relevant, the purpose of 'into wind' is to test the candidate's understanding of environmental conditions and club flying.

The size of the circuit must be a minimum of approximately 50m long and centred to the candidate.

During the circuit the aircraft must be facing forward and travelling forward at all times. The corners should be a positive smooth 90-degree rounded corner, that uses both roll and yaw input. The aircraft must not be stopped and pirouetted at each corner.

The circuit will end when the aircraft passes in front of the candidate.

The examiner will look to assess that the candidate has:

- » Checked it is safe to take-off and called their intent to do so.
- » Climbed from take-off in a reasonably smooth manner.
- » Climbed to a height that enables safe transition around a full circuit as necessary.
- » Performed four equal 90° turns and flown a true rectangle, i.e. not a parallelogram.
- » Made correct use of controls to create positive turns at each corner.
- » Flown centred to their own position.

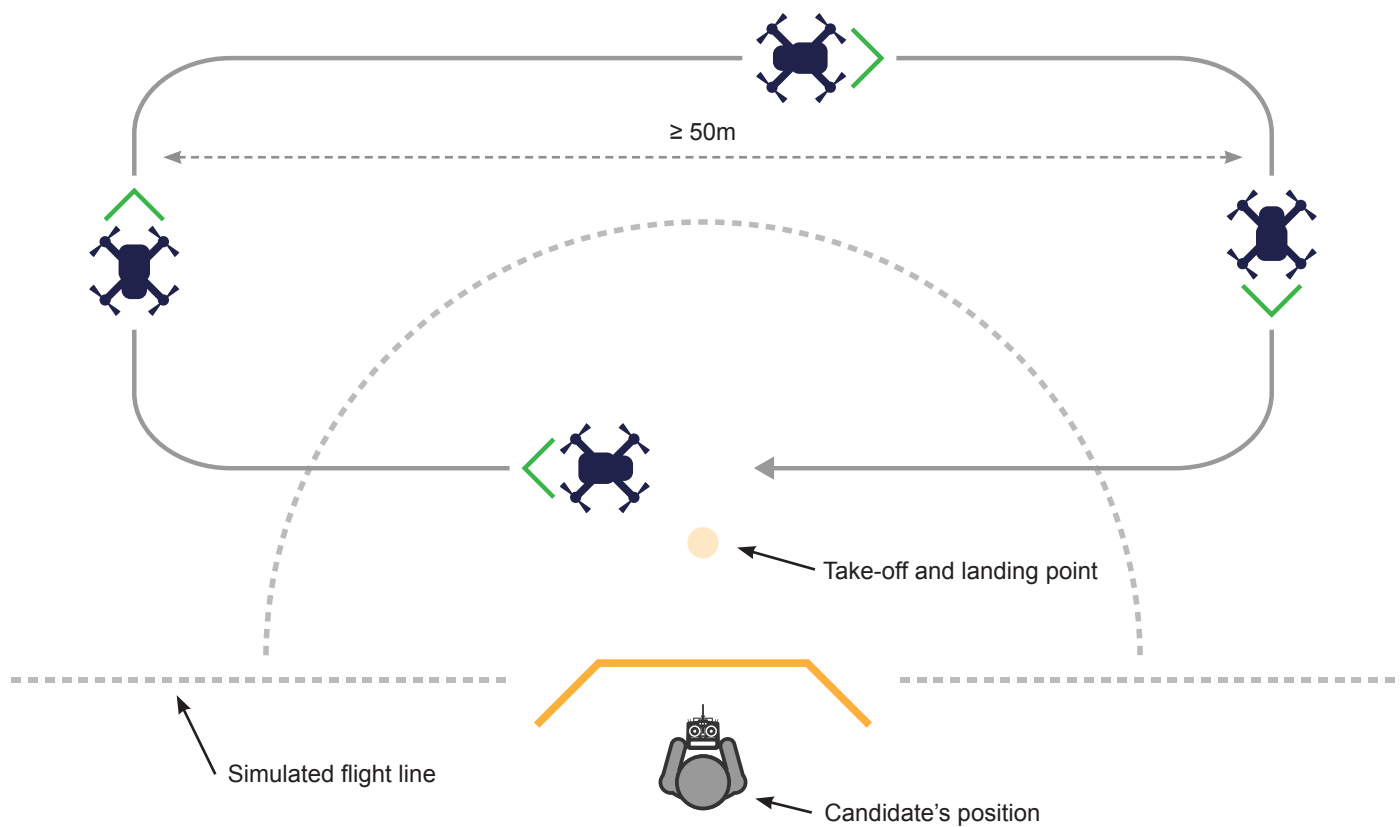
At the end of the exercise and if safe to do so the aircraft should be maintained flying in the circuit for exercise 4.

Test Exercises - Practical

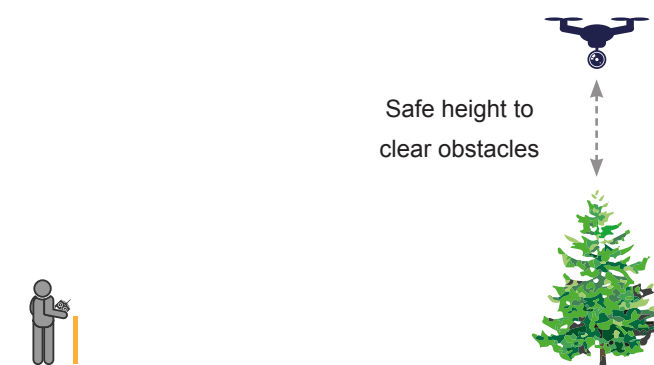


Location of exercise in flight area:

Example: Clockwise, i.e. wind from the left



Height of exercise above the ground:





4. Rectangular circuit 'downwind'.

The candidate must now reverse their path and fly a rectangular circuit starting 'downwind'.

The candidate may opt to simply pirouette to reverse direction or perform a procedural turn, any method of reversing direction is acceptable.

NOTE: The height and size of the circuit should be consistent with the one flown into wind, but in the opposite direction.

During the circuit the aircraft must be facing forward and travelling forward at all times. The corners should be a positive smooth 90-degree rounded corner, that uses both roll and yaw input. The aircraft must not be stopped and pirouetted at each corner.

The circuit will end when the aircraft passes in front of the candidate.

The examiner will look to assess that the candidate has:

- » Checked it is safe to reverse direction and called their intent to do so.
- » Maintained a height that enables safe transition around a full circuit as necessary.
- » Performed four equal 90° turns and flown a true rectangle, i.e. not a parallelogram.
- » Made correct use of controls to create positive turns at each corner.
- » Flown centred to their own position.

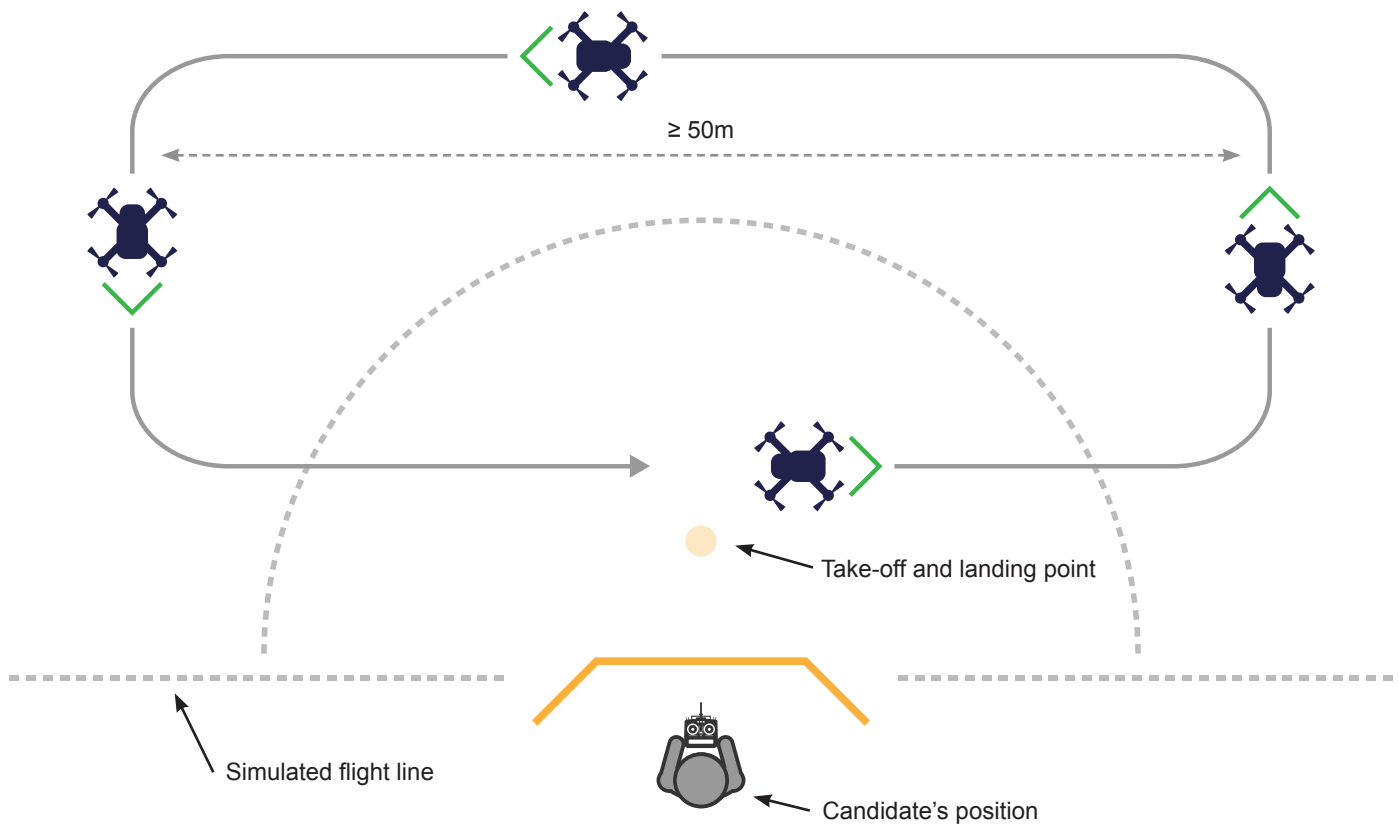
At the end of the exercise and if safe to do so the aircraft should be maintained flying in the circuit for exercise 5.

Test Exercises - Practical

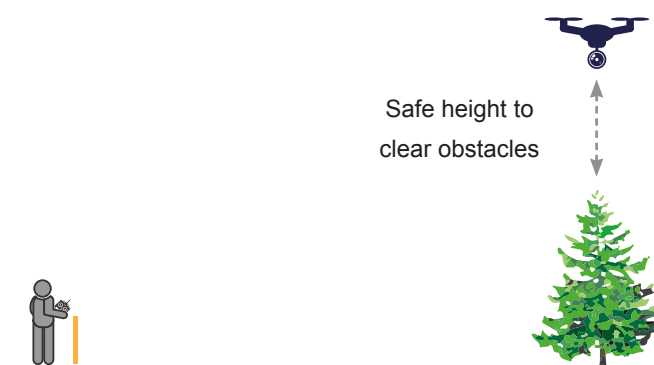


Location of exercise in flight area:

Example: Counter clockwise, i.e. wind from the left



Height of exercise above the ground:





5. Figure of eight.

The candidate must now position the drone at a safe height of their choice (a safe height is one that is deemed sufficient to clear any obstacles in the flying area and maintain visual line of sight) at least 20m in front of themselves to a point that can be used as the 'centre' for a figure of eight.

The candidate must then fly a figure of eight with a crossover point centred in front of themselves, that is made of two reasonably equal sized loops.

During the figure of eight the aircraft must be facing forward and travelling forward at all times.

Once the aircraft is back over the centre point, the candidate should reverse the aircraft back to over the take-off and landing point, hover for about 5 seconds and then land.

NOTE: The candidate may opt to fly either the left or right loop of the figure of eight first, however both loops must be flown back-to-back in one manoeuvre.

The examiner will look to assess that the candidate has:

- » Selected a starting point that is far enough forward to allow enough space to fly either loop and not result in flying behind themselves.
- » Completed two loops of a reasonably consistent size.
- » Maintained a height that enables safe transition around a full circuit as necessary.
- » Made correct use of controls to create reasonably round circles, i.e. used both roll and yaw.
- » Flown centred to their own position.
- » Checked it is safe to land and called their intent to do so.

NOTE: A candidate will not be penalised for the size of their loops, however under no circumstances must either loop come behind the candidate.

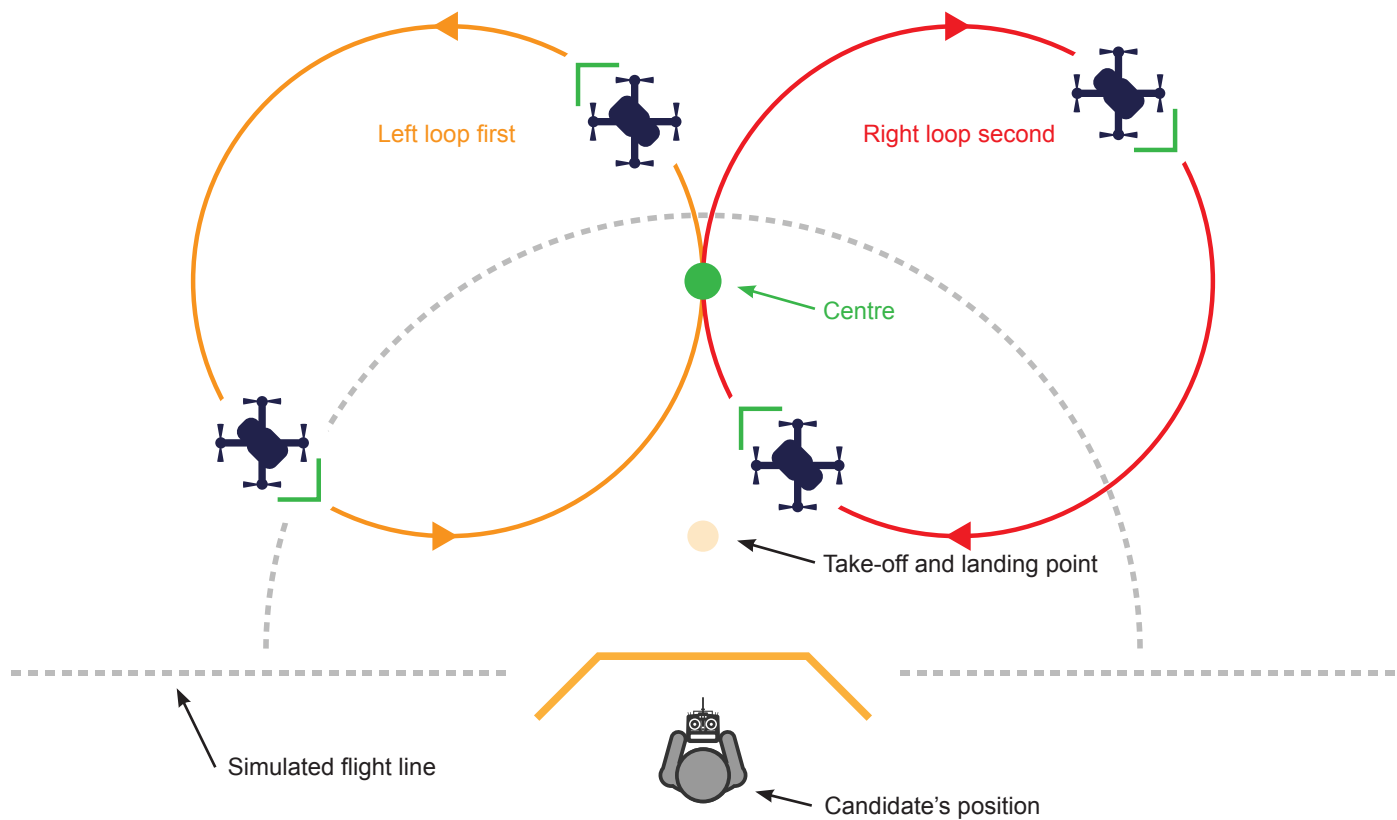
At the end of the exercise and if safe to do so the aircraft may be left armed and ready to fly in the take-off and landing position ready for exercise 6.

Test Exercises - Practical



Location of exercise in flight area:

Example: Left loop first



Height of exercise above the ground:





6. 45° ascent and descent.

The candidate must take-off and climb to a hovering height of approximately 10ft (i.e. slightly above head height) over the take-off point, then move forwards at least 5m and rotate the aircraft 90° either left or right at their choice to 'side-on' and hold for approximately 5 seconds.

The candidate must then reverse the aircraft and ascend at the same time to create a 45° climb backwards and upwards equally. The aircraft should be side-on in orientation to the candidate.

The climb should continue to approximately 80ft (about two houses high), at which point the candidate must stop climbing and hold position for approximately 5 seconds, before then descending back down the reverse path at a reverse 45° descent to return to the starting point of the ascent and hold position for approximately 5 seconds.

The candidate should then return to a tail-in orientation and reverse the aircraft back to a position over the take-off and landing point, hover for about 5 seconds and then land.

The examiner will look to assess that the candidate has:

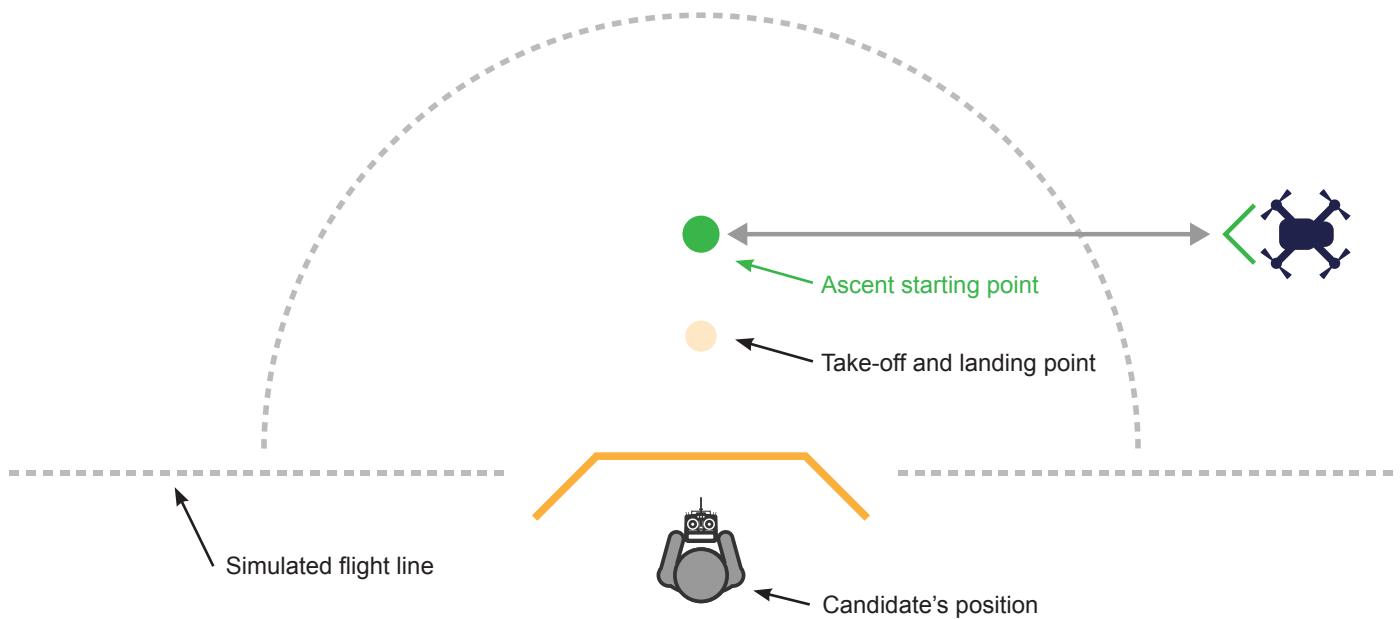
- » Checked it is safe to take-off and land and called their intent to do so.
- » Made correct use of controls to create a reasonably consistent 45° ascent and descent, i.e. used balanced throttle and pitch.
- » Flown side-on throughout the ascent and descent.
- » Descended back at 45° to the point at which they started the 45° ascent.

Test Exercises - Practical

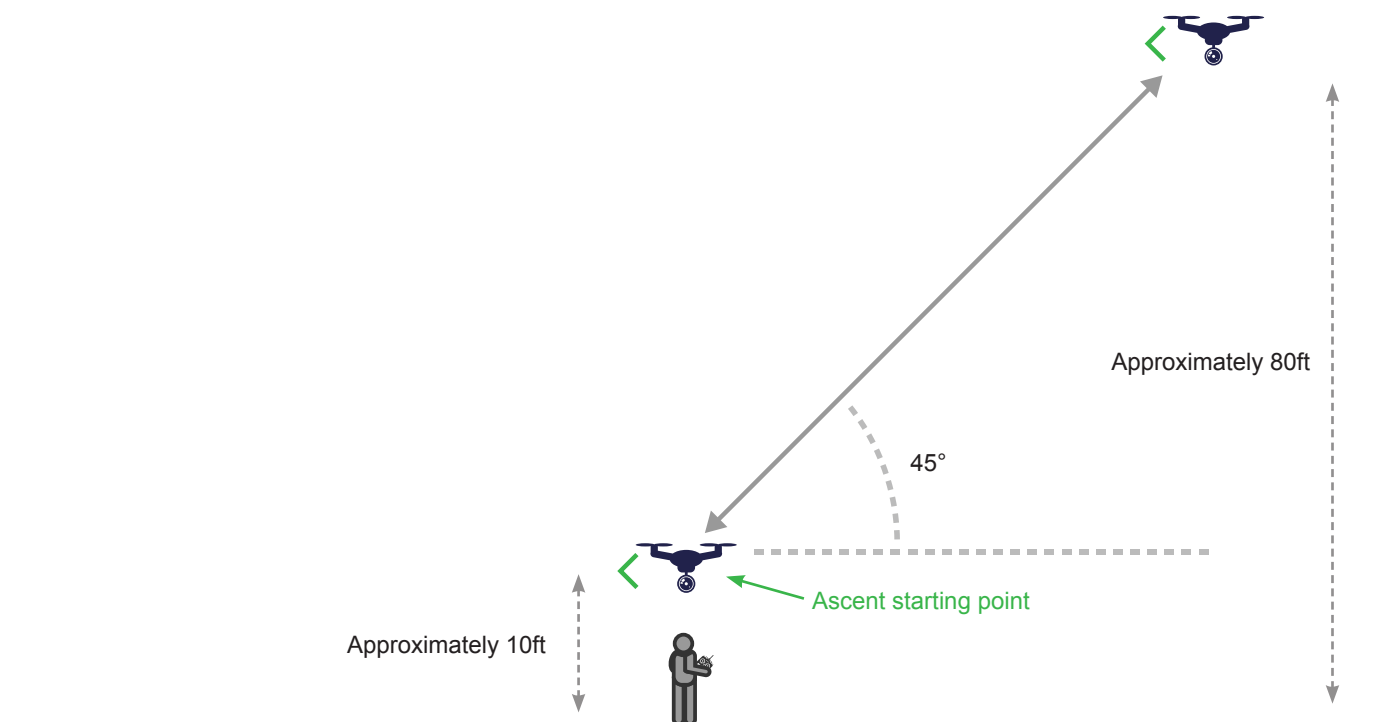


Location of exercise in flight area:

Example: Ascent to the candidate's right



Height of exercise above the ground:





7. Return to Home test.

The candidate must take-off and fly to a safe position at least 30m away from the take-off and landing point, then manually instigate a 'return-to-home' failsafe.

NOTE: As the method and approach for a return to home failsafe will vary from manufacturer, no specific description of 'how' this is to be done is provided, the candidate must be able to demonstrate this with their own machine.

As a general guidance, the aircraft must be flown a minimum of 30m away from the take-off and landing point to a safe position in the main flight area.

As the aircraft is likely to take an 'as the crow flies' path to the home point, the candidate should ensure that the position chosen to initiate the return-to-home failsafe will not result in a dangerous flight path.

NOTE: The candidate should allow the aircraft to complete a full automated landing. If the candidate opts to abort or interfere with the landing for a genuine safety reason (e.g. someone has walked into the landing area, or landing may cause the aircraft damage), and does so in a safe manner, the examiner should allow the candidate to repeat this exercise.

The examiner will look to assess that the candidate has:

- » Checked it is safe to take-off and called their intent to do so.
- » Checked the landing area is clear before instigating the return to home failsafe.
- » Clearly called 'failsafe' to alert other pilots.
- » Monitored the aircraft throughout the failsafe ready to resume control if necessary and possible.
- » Understood their failsafe settings and that the aircraft has performed as the candidate expected.
- » Checked it is safe to enter the designated take-off and landing area to retrieve their aircraft and called their intent to do so.

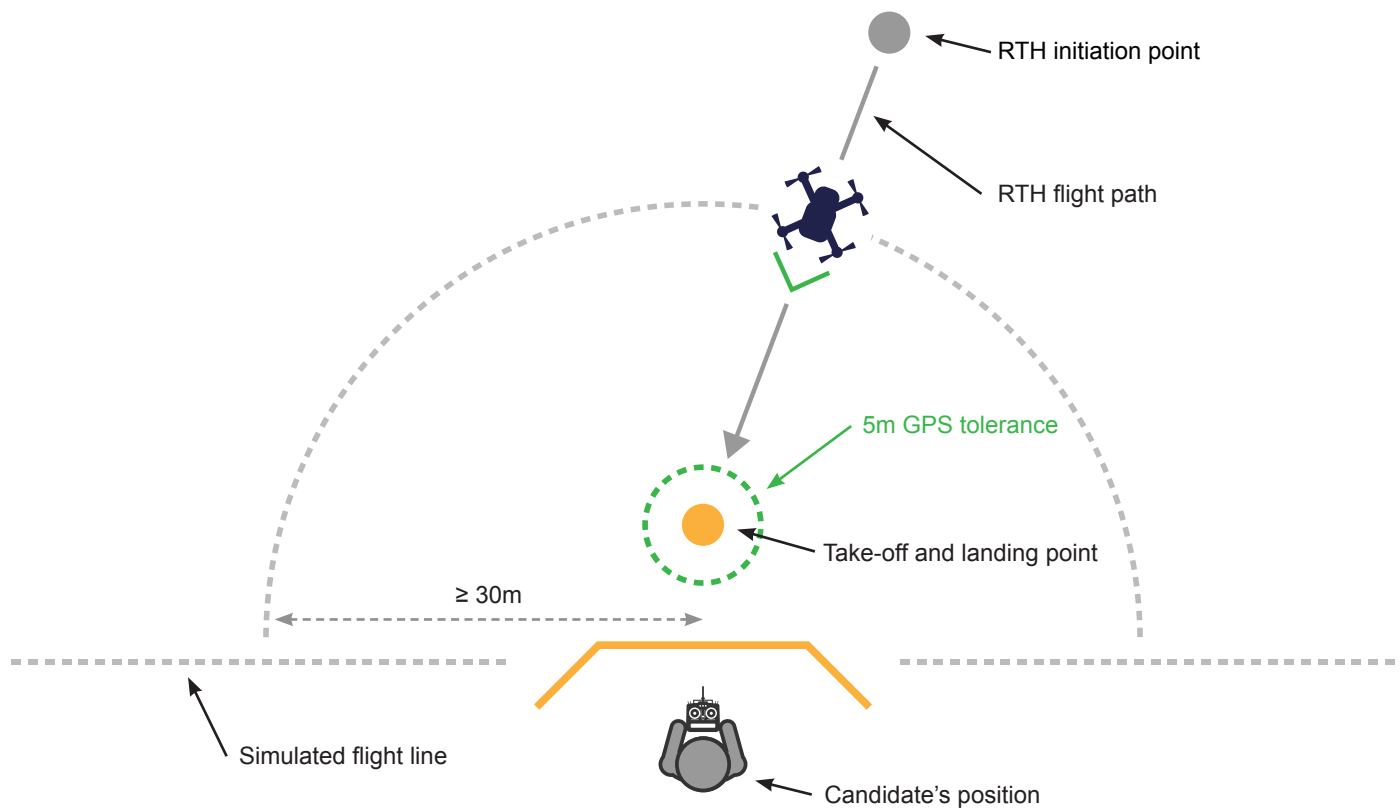
NOTE: It is accepted that the accuracy of the return to home failsafe is dependent on the quality of GPS signal and the candidate should not be penalised provided the aircraft returns to within approximately 5m of its taking-off point. If the aircraft does not land within 5m of its taking-off point the examiner should consider whether the failsafe was set correctly (or if the aircraft itself was flown faulty) and likely consider the test a failure.

Test Exercises - Practical



Location of exercise in flight area:

Example: Return to home point and 'as the crow flies' flight path



Height of exercise above the ground:





8. Carry out post-flight checks.

The candidate must demonstrate the steps they take to make their aircraft 'safe' at the end of their flight. This must cover and include:

- » Assessing their aircraft's condition using post-flight checks as detailed in the BMFA Member's Handbook.
- » Ensuring their aircraft is handled in a safe manner.

The examiner will look to assess that the candidate has:

- » A steady and regular routine of checks.
- » Operated in a generally safe manner, for example when stopping any motor, and/or, powering down.
- » Appropriately assessed that the aircraft is now safe to be left unrestrained.

Test Exercises - Theory



1. Successfully answer a minimum of five (5) safety matter questions.

The candidate must successfully answer a minimum of five (5) safety matter questions. The examiner may choose their own questions, which must be based on the following criteria:

- » Safety matters as detailed in the BMFA Member's Handbook.
- » Best practices relevant to the type of aircraft the candidate is operating.
- » Local site rules.
- » UK laws and regulations for model aircraft and drone operating and flying, which may include questions from the 'Mandatory Questions' list at the examiner's discretion.

NOTE: The candidate must not be expected to answer questions that are not related to safety, and/or flying legally. For example, questions relating to the BMFA's, or a club's constitution are not considered 'safety' related, however questions relating to a site's, or club's rules are.

The examiner will look to assess that the candidate has:

- » A suitable understanding of safety for the type of aircraft they are operating, i.e. the candidate is aware of the dangers and risks specific to the type of aircraft they are flying.
- » A suitable understanding of safety for the type of environment they are operating in, i.e. the candidate is aware of the rules for the area they are operating in.
- » A suitable understanding of how to minimise the risk of any potential for any accident, while also demonstrating an understanding of what to do in the event one occurs.



IMPORTANT:

No matter how well the flying element of the test has been performed, if the candidate is unable to answer the theory questions when asked, the test must be considered a failure.

Test Exercises - Theory



2. Provide evidence of remote pilot competency.

Further to the legal requirement for a remote pilot to hold a current UK Flyer ID, the candidate must provide evidence of knowledge of the BMFA Article 16 Authorisation (regardless of the weight of the aircraft used for the test). This may be achieved in one of two ways:

Option 1 - Provide proof of a current BMFA RCC (registration competency certificate).

If the candidate is able to demonstrate to the examiner that they hold a current BMFA RCC, then this is part 2 of the theory element complete.

NOTE: The examiner must record the pass date of the candidate's RCC on the test form.

If the candidate is NOT able to demonstrate to the examiner that they hold a current BMFA RCC, then they must proceed to option 2.

NOTE: Once a candidate has passed the RCC, they can show it to the examiner electronically by logging into their page of the 'Membership Portal'. Alternatively, the candidate may opt to download it to an electronic device or print a paper copy to show as proof.

Option 2 - Successfully answer a minimum of five (5) mandatory questions.

If the candidate has not passed the BMFA RCC, and/or, is unable to provide evidence of having done so to the examiner, then they must answer five (5) questions from the BMFA Mandatory Question list, which can be found at the end of the PART 1: ALL TESTS GUIDANCE document. The examiner should only ask five (5) mandatory questions and if the candidate does not know the answer to any of the questions, then the test must be considered a fail.

NOTE: The examiner must record the numbers of the mandatory questions asked on the candidate's test form.



IMPORTANT:

The BMFA system holds a record of all current RCC holders. If a test form is submitted for a candidate without the appropriate 'theory part 2' being completed, then the test pass cannot be entered into the system and the test may be rendered null and void.

**BMFA address.**

British Model Flying Association
c/o British Gliding Association
8 Merus Court
Meridian Business Park
Leicester
LE 19 1RJ

0116 244 0028

<https://achievements.bmfa.uk>

Candidate Training Log

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Test Exercises - Summary



Practice checklist

Result: Practical Check List Item: (To be completed in the following order)

- ☐ 1. **Carry out pre-flight checks.** (Demonstrating knowledge of 'SWEETS' and the 'BMFA Member's Handbook')
- ☐ 2. **Point-to-point.** Take off, hover over the take off and landing point for ten (10) seconds, then complete the agreed point-to-point path, at the end hover for approximately five (5) seconds over the take off and landing point, and land.
- ☐ 3. **Rectangular circuit 'into wind'.** Take off and move to a circuit position, rotate 90° to side-on and complete a rectangular circuit 'into wind'.
- ☐ 4. **Rectangular circuit 'down wind'.** Reverse and fly a circuit in the opposite direction to that flown for 3.
- ☐ 5. **Figure of eight.** Position the aircraft tail-in at least 20m in front of the candidate and perform a figure of eight circuit, with the crossover point in front of the candidate. At the end of the figure of eight, return to tail-in, reverse to the take off and landing point, hover for five (5) seconds and land.
- ☐ 6. **45° ascent and descent.** Take off, move forwards at least 5m, rotate 90° to side-on and hold position for approximately five (5) seconds, complete the 45° reverse ascent to a height of about 80ft, hold position for approximately five (5) seconds, then descend down the same path to the starting point and hold position for approximately five (5) seconds, return to tail-in, reverse to the take off and landing point and hover for approximately five (5) seconds and land.
- ☐ 7. **Return to Home test.** Take off and fly to a safe position at least 30m away from the take off and landing point, manually instigate a 'return-to-home' failsafe.
- ☐ 8. **Carry out post-flight checks.** (The candidate must show knowledge of the BMFA Member's Handbook)

Result: Theory Check List Item: (To be completed at the end of the test)

- ☐ 1. **Successfully answer a minimum of five (5) safety matter questions.**
- ☐ 2. **Option 1) - Proof of a current BMFA RCC and date passed:** (If not go to 'Option 2')
Option 2) - Successfully answer a minimum of five (5) mandatory questions instead of 'Option 1'.
- Mandatory questions asked if applicable (.....) (.....) (.....) (.....) (.....)



READY TO TAKE A TEST?:

If you have progressed with this document and now feel ready to take a test, or would like to arrange a mock test, you can engage with the Achievement Scheme via the various methods detailed in 'PART 1: ALL TESTS GUIDANCE'.

Good luck, it is a great personal achievement goal you have set yourself.