

Mandatory Questions

Please note that the mandatory questions have been updated due to recent changes in the Air Navigation Order, all tests conducted after 1st May 2019 should use the updated questions as shown below.

From April 2016 it is a requirement of all tests (excluding 'C' certificate tests) that candidates must answer correctly 5 questions taken from the list of mandatory questions based on legal aspects of model aircraft flying. The examiner should only ask 5 questions and if the candidate does not know the answer to any question the test must be considered as a fail. The examiner will then proceed to ask a minimum of 5 (A tests) or 8 (B tests) questions based on the BMFA Safety Codes for General Flying and local flying rules and for the 'B' certificate the 'Safety Code for Model Flying Displays'.

BMFA Mandatory Questions List for Use in the BMFA Achievement Tests

Revised 14/04/19

Q(1) Who Regulates all civil flying activities over the United Kingdom, including model aircraft ?

ANSWER:

The Civil Aviation Authority.

Q(2) How are the rules and regulations for flying established in law by Parliament (statute) ?

ANSWER:

As a series of Articles contained within in the Air Navigation Order (ANO).

Q(3) What does Article 240 of the ANO state, in relation to endangering an aircraft or any person in an aircraft?

ANSWER:

'A person must not recklessly or negligently act in a manner likely to endanger an aircraft, or any person in an aircraft.'

Q(4) What does Article 241 of the ANO state, in relation to endangering a person or property?

ANSWER:

'A person must not recklessly or negligently cause or permit an aircraft to endanger any person or property.'

Q(5) Who is legally responsible to ensure that a model is flown safely ?

ANSWER:

The *remote pilot*.

Q (6) Which Civil Aviation Publication (CAP) relates specifically to the use of model aircraft, and for which specific purposes only?

ANSWER:

CAP 658 (as amended by CAP 1763), for sport and recreation purposes only.

Q(7) According to CAP 658 (as amended by CAP 1763), which model aircraft are required to have an operating failsafe and what is the minimum setting ?

ANSWER:

1. Any aircraft >7kg.
2. Any Gas Turbine powered aircraft.
3. Any powered model aircraft fitted with a receiver capable of operating in failsafe mode.

As a minimum, reduce the engine(s) speed to idle on loss or corruption of signal.

Q(8) What does Article 94 of the ANO say about the responsibilities of *the remote pilot* of a small unmanned aircraft ?

ANSWER:

1. The *remote pilot* of a small unmanned aircraft may only fly the aircraft if reasonably satisfied that the flight can safely be made.
2. The *remote pilot* must not fly a small unmanned aircraft within the flight restricted zone (FRZ) of a protected aerodrome unless permission has been obtained from aerodrome Air Traffic Control (ATC).

Q(9) What does Article 94 of the ANO say about visual contact with small unmanned aircraft ?

ANSWER:

The *remote pilot* must maintain direct, unaided visual contact with the aircraft sufficient to monitor its flight path in relation to other aircraft, persons, vehicles, vessels and structures for the purpose of avoiding collisions.

Q(10) What is the maximum legal operating height for a small unmanned aircraft(a), and what is required before you can exceed it(b)?

ANSWER:

(a) 400 feet above the surface.

(b) Within an FRZ, permission of the relevant ATC, or other relevant authority, outside of an FRZ, permission is required from the CAA, either individually or via a published exemption. An agreed maximum altitude may be part of these permissions and unaided visual line of sight to the aircraft must always be maintained.

Q(11) What does Article 94 of the ANO say about ‘commercial operation’ for small unmanned aircraft?

ANSWER:

The *operator* of a small unmanned aircraft must not cause or permit a small unmanned aircraft to be flown for the purposes of commercial operations, and the *remote pilot* of a small unmanned aircraft must not fly it for the purposes of ‘commercial operation’ except in accordance with a permission granted by the CAA.

Q(12) How is a flight for the purpose of ‘commercial operation’ defined ?

ANSWER:

Any flight for which *remuneration* or ‘valuable consideration’ is given or promised in respect of the flight or the purpose of the flight. Essentially any gain you may make from the flight/operation undertaken.

Q(13) How is ‘a small unmanned surveillance aircraft’ defined ?

ANSWER:

An aircraft which is equipped to undertake any form of surveillance or data acquisition (this includes all camera equipped aircraft).

NOTE: The provision of data solely for the use of monitoring the model is not considered to be applicable to the meaning of ‘surveillance or data acquisition’.

Q(14) What are the separation requirements of Article 95 – for small unmanned surveillance aircraft – when operating over or within a congested area or organised open-air assembly of more than 1,000 persons ?

ANSWER:

The aircraft must not fly over or within 150 metres of a congested area or organised open-air assembly of more than 1,000 persons

Q(15) What are the separation requirements of Article 95 – for small unmanned surveillance aircraft – in respect of any vessel, vehicle or structure which is not under the control of the operator or remote pilot of the aircraft ?

ANSWER:

The aircraft must not fly within 50 metres of any vessel, vehicle or structure not under the control of the operator and/or remote pilot of the aircraft.

Q(16) Except during take-off and landing, what are the separation requirements of Article 95 – for small unmanned surveillance aircraft – in respect to persons not under the control of the operator or remote pilot?

ANSWER:

The aircraft must not fly within 50 metres of any person not under the control of the operator and/or remote pilot of the aircraft.

Q(17) What must be obtained before any flight within the ‘flight restriction zone’ of a protected aerodrome for any aircraft?

ANSWER:

Obtain permission from the appropriate Air Traffic Control unit, or other relevant authority for the FRZ.

Q(18) CAA General Exemption E 4457 – permits FPV flight without a buddy box, but with a competent observer. (a) How must the competent observer monitor the flight and (b) What is the maximum mass of aircraft that may be flown under this exemption?

ANSWER:

(a) The competent observer must maintain direct unaided visual contact with the model at all times and communicate with the *remote pilot*.

(b) The aircraft must be below 3.5kg including batteries and fuel.

Q(19) Who has legal responsibility for the safety of an FPV flight a) conducted with a buddy box lead and b) conducted without a buddy box lead ?

ANSWER:

(a) The *remote pilot* (master Tx) who must maintain direct unaided visual contact with the model at all times.

(b) The *remote pilot*, who must have a competent observer maintaining direct unaided visual contact with the model at all times.

Q(20) According to CAP 658 (as amended by CAP 1763) what are the 8 'Only fly if' checks for an FPV flight of an aircraft over 3.5kg ?

ANSWER:

1. The activity is solely for 'sport and recreation' purposes;
2. Two pilots take part;
3. A Buddy Box system is employed;
4. The *remote pilot* operates the master transmitter;
5. The *remote pilot* does not wear the headset or view a screen;
6. The aircraft remains within the natural unaided visual range of the remote pilot;
7. Reliable operation of the Buddy Box is established;
8. A clear handover protocol is established.

Q(21) What is a Flight Restriction Zone (FRZ) and how would you find out if you were operating in the FRZ of a Protected Aerodrome?

ANSWER:

(a) An FRZ is a large circular area centred on the reference point of a protected aerodrome, with the addition of rectangular extensions from the end of the runways.

(b) All FRZs are shown on a map on the CAA/NATS website at <https://dronesafe.uk/restrictions>

Q(22) What is a Protected Aerodrome?

ANSWER:

1. An EASA certified aerodrome i.e. what would typically be called an airport.
2. A Government aerodrome i.e. a Military airfield.
3. A National licenced aerodrome i.e. most of the smaller, 'general aviation' airfields.

Q(23) What is the definition of a model aircraft – legally a 'small unmanned aircraft'?

ANSWER:

A small unmanned aircraft is any unmanned aircraft, other than a balloon or a kite, having a mass of not more than 20kg without fuel, but including any articles or equipment installed or attached to the aircraft at the commencement of the flight.

Definitions:

CAA Civil Aviation Authority

CAP Civil Aviation Publication

ANO Air Navigation Order

FRZ Flight Restriction Zone

FPV First Person View

ATC Air Traffic Control