

SECTION TWO - VMC, IMC, CONTROLLED AIRSPACE, FLIGHT RULES  
AND RULES OF THE AIR

Q. What are the minima for VFR flight within the UK?

A.

	Aircraft Class	In-Flight Visibility	Distance from Cloud
Inside CAS	All	5nm (9km)	1nm Horizontally 1000ft Vertically
Outside CAS Above 3000ft	All	5nm (9km)	1nm Horizontally 1000ft Vertically
Outside CAS at or below 3000ft in excess of 140 kts IAS	All	3nm (5.5km)	1nm Horizontally 1000ft Vertically
Outside CAS at or below 3000ft IAS 140kts or less	All except helicopters	3nm (5.5km)  1nm (1.8km)	1nm Horizontally 1000ft Vertically  OR Clear of cloud and in sight of surface
Outside CAS at or below 3000ft IAS 140kts or less	Helicopters	3nm (5.5km)	1nm Horizontally 1000ft Vertically  OR Clear of cloud and in sight of surface

(JSP 318A/2/0602)

Q. What are the Quadrantal and Semi-Circular rules of the UK?

A. An aircraft in level flight above 3000ft amsl outside CAS under IFR should be flown at a level appropriate to its magnetic track in accordance with the rules listed below:

(1)	<u>BELOW FL245</u>	<u>MAGNETIC TRACK</u>	<u>CRUISING LEVEL</u>
		000 - 089	Odd thousands of ft
		090 - 179	Odd thousands plus 500ft
		180 - 269	Even thousands of ft
		270 - 359	Even thousands plus 500ft
(2)	<u>FL245 - FL280</u>	<u>MAGNETIC TRACK</u>	<u>CRUISING LEVEL</u>
		000 - 179	FL250, FL270
		180 - 359	FL260, FL280
(3)	<u>AT OR BELOW FL290</u>	<u>MAGNETIC TRACK</u>	<u>CRUISING LEVEL</u>
		000 - 179	FL290 or higher levels at intervals of 4000ft
		180 - 359	FL310 or higher levels at intervals of 4000ft

(JSP 318A/2/0605)

Q. When are IFR Mandatory in the UK?

A. (1) In IMC.

(2) At night in CAS irrespective of weather conditions.

(3) In CAS that has been notified in accordance with ATC Regulations of 1981 and Rules of the Air.

(JSP 318A/2/0604)

Q. What are the IFR for flights in CAS?

A. (1) A Flight Plan must be submitted to the appropriate ATCC.

(2) Clearance for the flight must be obtained from the ATCC.

(3) Pilot must have a valid instrument rating.

(4) Aircraft must carry appropriate radio equipment on the notified frequencies.

(5) Aircraft must carry specific radio navigation equipment.

(6) Aircraft must carry and operate SSR Mode 3/A 4096 Codes in accordance with notified procedures.

(7) Flight must be conducted in accordance with the ATC clearance and instructions received.

Note: Aircraft flying below FL100 in CAS and in receipt of an approved crossing service may be exempt from carrying and operating SSR.

(JSP 318A/2/0604)

Q. For the purposes of standardisation of ATC procedures, how is night defined?

A. Night is defined as the time between 30 minutes after sunset to 30 minutes before sunrise, being determined at surface level or by the appropriate authority.

(JSP 318A/DEFN/XVIII)

Q. When is a Control Zone IMC?

A. When ground visibility is less than 10km and the cloud ceiling less than 1500ft.

(JSP 318A/1/2/0208)

Q. What is a 'SPECIAL VFR' flight?

A. Normally a pilot may not fly under VFR in CAS at night or in CAS which is mandatory IFR.

To facilitate flights in Control Zones which are restricted by these conditions, special procedures are available for pilots unable to comply with IFR.

Such a 'SPECIAL VFR' flight must be made in accordance with the rules published in PD4 and have the authorisation of the appropriate ATC Zone authority. It must also be made in accordance with the special instructions issued by that Unit and the pilot is not absolved from obeying the Rules of the Air.

(JSP 318A/2/0603)

Q. In what order are aircraft to give way to each other?

A. Flying machines give way to airships, gliders and balloons.

Airships give way to gliders and balloons.

Gliders give way to balloons.

(JSP 318A/2/0702)

Q. What is the rule for 2 aircraft converging in the air?

A. The aircraft that has the other on its right gives way.

(JSP 318A/2/0702)

Q. What is the rule for 2 aircraft approaching head on?

A. Both aircraft are to turn to the right.

(JSP 318A/2/0703)

Q. What is the rule for aircraft overtaking?

A. The overtaking aircraft turns right and keeps clear but a glider overtaking another glider in the UK may alter course to the right or left.

(JSP 318A/2/0704)

Q. What is the right of way on the ground?

A. (1) Vehicles and aircraft being taxied are to give way to aircraft being towed.

(2) Vehicles not towing aircraft are to give way to taxiing aircraft.

(JSP 318A/2/0708)

Q. What is the purpose of a MATZ?

A. The purpose of a MATZ is to provide a volume of airspace within which increased protection may be given to aircraft in the critical stages of circuit, approach and climb-out.

(JSP 318A/2/0509)

Q. What are the dimensions of a MATZ?

A. The airspace within 5nm radius of the ARP and from ground level to 3000ft above airfield level. A stub may exist which is 5nm long and 4nm wide and which extends 1000ft up to 3000ft above airfield level and which is aligned within a selected final approach path. In some zones the stub may be absent, reduced in size or an additional stub may be aligned to a secondary instrument runway.

(JSP 318A/2/0509)

Q. What is the datum for the upper limit of a Combined MATZ?

A. The upper limit of a Combined MATZ is measured from the elevation of the higher or highest airfield in the group.

(JSP 318A/2/0509)

Q. Is the observance of a MATZ mandatory?

A. The procedures for flight in a MATZ apply to military aircraft in VMC and IMC.

Observance of a MATZ is not mandatory for civil aircraft, although they are encouraged to make use of the MATZ penetration service on VHF RT.

(JSP 318A/2/0509)

Q. Define Controlled Airspace.

A. CAS is airspace of defined dimensions within which an ATC service is provided to IFR flights.

(JSP 318A/2/0503)

Q. What is the difference between a control zone and a control area?

A. A control zone extends upwards from the surface of the earth to a specified limit.

A control area extends upwards from a specified height above the surface of the earth without an upper limit unless one is specified.

(JSP 318A/2/0504-0505)

Q. What are the pilots' instrument ratings?

A. Amber, White Instrument, White Procedural, Green Instrument, Green Procedural, Master Green Instrument and Master Green Procedural.

(JSP 318/1/3/0301)

Q. What are the two types of clearance based on the flight times of the aircraft from an airfield to the CAS?

A. (1) Pre-flight clearance when the point of entry is within 10 mins flying time.

(2) In-flight clearance when the point of entry is more than 10 mins flying time.

(JSP 318A/2/1004)

Q. May a Terminal Controller issue an ATC clearance?

A. No - it must be issued by the authority operating the CAS. A Terminal Controller may assist the captain to obtain the clearance.

(JSP 318A/2/1004)

Q. What is an ADVISORY ROUTE?

A. A designated route along which an air traffic advisory service is available.

(JSP 318A/2/0507)

Q. What is an airway?

A. A control area, or part of a control area, in the form of a corridor usually ten nautical miles wide, the centre line of which is marked by navigation aids.

(JSP 318A/2/0505)

Q. Can gliders enter an airway?

A. Gliders may cross an airway in VMC but must remain clear in IMC. Gliders must however remain clear of purple airspace at all times.

(UK Air Pilot)

Q. How are cruising levels generally allocated on UK airways?

A. (1) ODD flight levels for EASTBOUND flights.

(2) EVEN flight levels for WESTBOUND flights.

(ERC)

Q. How are the upper limits of an airway generally defined and what is the maximum they can be?

A. (1) Generally as flight levels except in the vicinity of Terminal Control Areas where the base is expressed as an altitude.

(2) FL245.

(JSP 318A/2/0505)

- Q. What size of aircraft is classed as a light propeller driven aircraft?
- A. A piston or turbo-prop aircraft having a maximum total weight authorised of 12,500lbs or less.
- (JSP 318A/DEFN/XVII)
- Q. When an aircraft is flying in sight of the ground, on which side should he keep the land marks?
- A. The pilot should keep the line of land marks on the left.
- (JSP 318A/2/0707)
- Q. What action would the pilot of an aircraft take if, when in an emergency, he needs to cross an airway immediately?
- A. The pilot may cross at an intermediate 500ft flight level and at 90° if possible and must report the circumstances to the parent ATCC on landing.
- (JSP 318A/2/0505)
- Q. What is a clutch QFE?
- A. Clutch QFE is the airfield QFE of the highest airfield in a combined MATZ.
- (JSP 318A/2/0509)
- Q. What is the minimum pilot rating for flights within CAS?
- A. Amber.
- (JSP 318/1/3/0301)
- Q. What are ENTRY/EXIT lanes?
- A. Entry/exit lanes are established in certain control zones to permit aircraft to operate to and from airfields in IMC but not under IFR.
- (JSP 318A/2/0504)
- Q. What are the dimensions of an ATZ?
- A. Radius of 1½nm from the airfield boundary and extending from the surface to a height of 2000ft above ARP.
- (JSP 318A/2/0508)
- Q. What is a Terminal Control Area?
- A. A portion of a control area normally situated at the confluence of airways in the vicinity of one or more major airfields.
- (JSP 318A/2/0505)

Q. When may a pilot cross the base of an airway without ATC clearance?

A. When the lower limit of the airway is defined as a flight level.  
(JSP 318A/2/0505)

Q. Define a Special Rules Area.

A. Special Rules Area is an area within a FIR/UIR extending upwards from a flight level or specified altitude to a specified upper limit within which aircraft are required to comply with ATC instructions.  
(JSP 318A/2/0506)

Q. Do the Services recognise advisory routes?

A. Generally advisory routes are not recognised by the Services and military pilots are not obliged to obey the rules laid down for their operation unless they wish to use the routes and receive an air traffic advisory service.  
(JSP 318A/2/0507)

Q. How long before crossing an airway must the pilot of an aircraft request clearance when:

(1) Crossing under the control of an ATCRU?

(2) Receiving a procedural crossing service?

A. (1) At least 5 mins before entry.  
(2) At least 10 mins before intended crossing point.

(JSP 318A/2/0505)

Q. What are the dimensions of the three bands into which the UK airspace is vertically divided?

A. (1) Lower Airspace - Surface to FL95.  
(2) Middle Airspace - FL95 to FL240.  
(3) Upper Airspace - FL245 and above.

(JSP 318A/2/0502)

Q. What is the minimum rating that is valid for flights along controlled airspace?

A. White Procedural.  
(JSP 318/1/3/0301)

Q. Define Authorisation.

A. Authorisation is the authority given to a pilot to fly a particular aircraft on a specified duty.  
(JSP 318A/DEFN/XV)

Q. What is clearance?

A. Clearance is the authorisation given by an ATC Unit for an aircraft to proceed under conditions specified by that Unit.

(JSP 318A/DEFN/XIV)

Q. Define notification.

A. Notification is the passing, by the operating authority, of the details of a proposed aircraft movement, in the air or on the ground, to the airfield ATC section for onward transmission where necessary to other airfields and/or ATCCs.

(JSP 318A/DEFN/XVIII)

Q. Why is the notification of aircraft movements essential?

A. Notification of aircraft movements ensures:

(1) Proper coordination of air traffic and the recording of aircraft movements.

(2) Overdue action is taken if necessary.

(3) Destination airfield takes diversion action at an early stage of the flight.

(4) Appropriate liaison with the air defence system.

(JSP 318A/2/1001)

Q. What details are to be included in the notification of an aircraft movement?

A. (1) Aircraft type and callsign.

(2) Flight details including destination airfield and proposed route and altitude/flight level if appropriate.

(3) ETD.

(4) Duration of flight.

(5) Endurance.

(6) Pilot's name and instrument rating.

(7) Total number of persons on board.

(JSP 318A/2/1001)

Q. What methods of crossing an airway are available to military aircraft?

A. (1) Under the control of an ATCRU.

(2) Procedural crossing under positive ATC clearance.



(3) In emergency at an intermediate 500ft level when neither a radar nor a procedural crossing can be obtained.

(4) At base of airway, where the lower limit is defined as a flight level.

(JSP 318A/2/0505)

Q. If a pilot intends to use an ADR and requires an advisory service, what should he do?

- A. (1) File a flight plan.  
(2) Comply with reporting procedures.  
(3) Maintain communication on the nominated frequency.

(FPD 1/3/3-8)

Q. When two or more aircraft are approaching any place for the purpose of landing, which aircraft has the right of way?

A. The aircraft at the lower altitude shall have the right of way, but it shall not cut in front of another aircraft that is on final approach to land or overtake that aircraft, provided that:

(1) When an Air Traffic Control Unit has communicated to any aircraft an order of priority of landing, the aircraft shall approach to land in that order.

(2) When the commander of an aircraft is aware that another aircraft is making an emergency landing, he shall give way to that aircraft, and at night, notwithstanding that he may have received permission to land, shall not attempt to land until he has received further information to do so.

(JSP 318A/2/0706)

Q. What are the rules for flights under IFR at altitudes below 3000ft AMSL in the UK outside controlled airspace?

A. Flights under IFR at altitudes below 3000ft AMSL outside controlled airspace are not permitted except for take-off and landing, unless specially cleared by MOD.

(JSP 318A/2/0604)

Q. What are the VFR for flights above 3000ft AMSL outside controlled airspace?

A. Pilots are recommended to select levels in accordance with the quadrantal and semi-circular separation systems whenever possible in the interests of flight safety.

(JSP 318A/2/0605)

Q. What are the hours of operation of a MATZ?

A. A MATZ will be operative when the airfield concerned, or in a combined zone any one of the airfields in the zone, is open for flying.

(JSP 318A/2/0509)

Q. What action should be taken by the captain of an aircraft when he intends to land at an airfield in a MATZ which is not the controlling ATC?

A. Captains of aircraft are to contact the destination airfield prior to entering the zone.

(JSP 318A/2/0509)

Q. Who is responsible for the establishment, cancellation or changes to dimensions of a MATZ?

A. HQ MATO.

(JSP 318A/2/0510)

Q. What action should be taken by pilots wishing to fly through a MATZ outside operating hours?

A. pilots are advised to proceed with caution if no reply is received to two consecutive calls.

(JSP 318A/2/0509)

Q. What is an advisory area?

A. An Advisory Area is a designated area within an FIR where air traffic advisory service is available.

(JSP 318A/2/0507)

Q. What is a Special Rules Zone?

A. A Special Rules Zone is an airspace within an FIR extending from ground level to a specified altitude or flight level, within which an aircraft is required to comply with ATC instructions.

(JSP 318A/2/0506)

Q. What is the minimum pilot rating for flights in IMC?

A. Amber.

(JSP 318/1/3/0301)

Q. What is the minimum pilot rating for flights in a control zone with special VFR clearance?

A. Amber.

(JSP 318/1/3/0301)