Visual flight rules
010 Air Law and ATC Procedures › 05 Rules of the air

QUESTION

What is VMC?

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Visual flight rules
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QUESTION

Can a VFR flight continue in weather below VMC?

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Visual flight rules
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QUESTION

Flight visibility and ground visibility. What is the difference?

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Visual flight rules
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QUESTION

Which cloud layers count for the ceiling?

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ANSWER

Weather conditions at or better than the minima for visibility, distance from cloud and ceiling.

Article 2(142)

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ANSWER

No. A VFR flight stays in VMC at all times. Only a special VFR flight in a CTR, with an ATC clearance, can operate below VMC.

SERA.5005(a); Article 2(140), 2(142); SERA.5005(a); GM3 SERA.8005(b)(b); SERA.5010 (chapeau)

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ANSWER

Flight visibility is what the pilot sees forward from the cockpit in flight. Ground visibility is the visibility at an aerodrome, reported by an observer or an automatic system.

Article 2(80); Article 2(82)

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ANSWER

The lowest layer below 20 000 ft (6 000 m) that covers more than half the sky. The ceiling is the height of its base above the ground or water.

SERA Article 2(50); Article 2(50)

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QUESTION

When does night start and end?

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Visual flight rules
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QUESTION

VMC minima at and above 10 000 ft AMSL?

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QUESTION

VMC minima below 10 000 ft AMSL, above the low band?

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QUESTION

Where is the top of the low band?

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ANSWER

Flight visibility 8 km. Distance from cloud 1 500 m horizontally and 1 000 ft vertically.

SERA.5001, Table S5-1; SERA.5001, Table S5-1, row 1

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ANSWER

Night is from the end of evening civil twilight to the start of morning civil twilight. Civil twilight ends or starts when the centre of the sun is 6° below the horizon.

SERA Article 2(97); Article 2(97); GM1 Article 2(97)

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ANSWER

At 3 000 ft AMSL or 1 000 ft above the terrain, whichever is higher.

SERA.5001, Table S5-1

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ANSWER

Flight visibility 5 km. Distance from cloud 1 500 m horizontally and 1 000 ft vertically.

SERA.5001, Table S5-1; SERA.5001, Table S5-1, row 2

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QUESTION

VMC minima in Classes F and G in the low band?

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QUESTION

When can the flight visibility in Classes F and G in the low band be 1 500 m?

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QUESTION

When does FL 100 replace 10 000 ft as the upper band boundary?

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QUESTION

VFR without an ATC clearance at an aerodrome in a CTR, or into any ATZ or circuit. Weather minima?

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ANSWER

Only where the competent authority prescribes it, at 140 kt IAS or less (or where other traffic is unlikely). Never at night.

SERA.5001, Table S5-1 note (***)(a); SERA.5005(c)(3)(ii); SERA.5001, Table S5-1 note (***)(a)(1); SERA.5001, note (***)(a)

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ANSWER

Flight visibility 5 km, clear of cloud, surface in sight.

SERA.5001, Table S5-1; SERA.5001, Table S5-1, row 3

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ANSWER

Reported ceiling 1 500 ft (450 m) and ground visibility 5 km at that aerodrome.

SERA.5005(b)(1); SERA.5005(b)(2); SERA.5005(b)(1), (2)

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ANSWER

When the transition altitude is lower than 10 000 ft.

SERA.5001, Table S5-1 and note (*); SERA.5001, Table S5-1 note (*)

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QUESTION

Night VFR. What is needed?

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Visual flight rules
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QUESTION

Night VFR minimum level, with no published minimum flight altitude?

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QUESTION

Highest level for VFR?

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QUESTION

VFR speed limit below 10 000 ft AMSL?

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ANSWER

1 000 ft above the highest obstacle within 8 km of your estimated position. Over high terrain or mountainous areas, 2 000 ft.

SERA.5005(c)(5)(i); SERA.5005(c)(5)(ii); SERA.5005(c)(5)(i), (ii)

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ANSWER

Permission of the State, a flight plan if you leave the vicinity of the aerodrome, two-way radio where available, an aerodrome ceiling of 1 500 ft (450 m), no reduced visibility, and the surface in sight in the low band.

SERA.5005(c)(3)(i); SERA.5005(c); GM1 Article 8.2(a); SERA.5005(c)(1); SERA.4001(b)(6)

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ANSWER

250 kt IAS, in Classes C to G.

SERA.6001; Appendix 4; SERA.6001(a)(3)–(7); Appendix 4 note 1; GM1 SERA.6001(b)

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ANSWER

FL 195. Exceptions up to FL 285 with an ATS authorisation, or in an airspace reservation. No VFR above FL 285 where 1 000 ft separation is applied above FL 290.

SERA.5005(d)(2); SERA.5005(d)(2)(ii); SERA.5005(e)

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QUESTION

VFR minimum height over a congested area or an open-air assembly of persons?

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QUESTION

VFR minimum height elsewhere?

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QUESTION

When can you fly below the VFR minimum heights?

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QUESTION

When do the VFR cruising levels apply?

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ANSWER

500 ft (150 m) above the ground or water, or above the highest obstacle within 150 m of the aircraft.

SERA.5005(f)(2)

PPL Knowledge

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Visual flight rules
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ANSWER

1 000 ft (300 m) above the highest obstacle within 600 m of the aircraft.

SERA.5005(f)(1)

PPL Knowledge

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ANSWER

In level cruise more than 3 000 ft (900 m) above the ground or water, unless ATC or the competent authority says otherwise.

SERA.5005(g)

PPL Knowledge

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Visual flight rules
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ANSWER

When needed for take-off or landing, or with permission of the competent authority.

SERA.5005(f); AMC1 SERA.5005(f); GM1 SERA.5005(f)

PPL Knowledge

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QUESTION

VFR cruising levels by magnetic track (SERA)?

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QUESTION

VFR cruising levels in Portugal?

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QUESTION

Special VFR. Where, and who decides?

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QUESTION

Special VFR pilot conditions (aeroplanes)?

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ANSWER

Magnetic track 270°–089° → even thousands + 500 ft (FL 45, 65, 85). 090°–269° → odd thousands + 500 ft (FL 35, 55, 75). Check the AIP in force.

AIP Portugal ENR 1.7.5; AIP Portugal ENR 1.7.5 (ENR 1.7-3); VFR Manual ENR 1.7-3; legal hook SERA.5005(g) ("unless otherwise specified … by the competent authority"); competent authority: ANAC; AIP Portugal GEN 1.7; SERA.5005(g)

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ANSWER

000°–179° → odd thousands + 500 ft (FL 35, 55, 75). 180°–359° → even thousands + 500 ft (FL 45, 65, 85).

SERA Appendix 3; SERA Appendix 3, 1.1; SERA Appendix 3, footnote 1

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ANSWER

Clear of cloud, surface in sight, flight visibility 1 500 m, 140 kt IAS or less.

SERA.5010(b)(2); SERA.5010(b)(3); SERA.5010(b)(1)–(3)

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ANSWER

Only in a CTR, with an ATC clearance. You ask; ATC authorises. By day only, unless the competent authority permits it at night.

SERA.5010 (chapeau); SERA.5010(a)

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QUESTION

Below which reported weather does ATC give no special VFR clearance to take off, land or join the circuit?

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Visual flight rules
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QUESTION

In which airspace classes does a VFR flight need an ATC clearance?

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Visual flight rules
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QUESTION

Night VFR. What must your licence hold?

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ANSWER

Classes B, C and D. VFR is not permitted in Class A.

SERA.5005(h)(1)–(3); SERA.8001(b)–(d); SERA.6001(a)(1)–(7); Appendix 4

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ANSWER

Ground visibility 1 500 m, or ceiling 600 ft (180 m).

SERA.5010(c)(1); SERA.5010(c)(2); SERA.5010(c)(1), (2)

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Visual flight rules
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ANSWER

A night rating.

FCL.810(a)(1)

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