**010-05-03**

# Visual flight rules: key figures

28 figures in 9 groups. Read the cue, say the figure, then check. Each group ends with a recap. Rules change: check the regulation in force.

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## Flight visibility at and above 10 000 ft AMSL

# 8 km

## Flight visibility below 10 000 ft AMSL

# 5 km

All classes, also in the low band

## Horizontal distance from cloud

# 1 500 m

All bands, except Classes F and G in the low band

## Vertical distance from cloud

# 1 000 ft

300 m. All bands, except Classes F and G in the low band

## Top of the low band

# 3 000 ft AMSL

Or 1 000 ft above the terrain, whichever is higher

## Upper band boundary

# 10 000 ft AMSL

FL 100 when the transition altitude is lower

## Classes F and G, low band, where the State prescribes it

# 1 500 m

At 140 kt IAS or less. Never at night

# VMC minima: recap

| CUE | FIGURE | DETAIL |
|---|---|---|
| Flight visibility at and above 10 000 ft AMSL | **8 km** | |
| Flight visibility below 10 000 ft AMSL | **5 km** | All classes, also in the low band |
| Horizontal distance from cloud | **1 500 m** | All bands, except Classes F and G in the low band |
| Vertical distance from cloud | **1 000 ft** | 300 m. All bands, except Classes F and G in the low band |
| Top of the low band | **3 000 ft AMSL** | Or 1 000 ft above the terrain, whichever is higher |
| Upper band boundary | **10 000 ft AMSL** | FL 100 when the transition altitude is lower |
| Classes F and G, low band, where the State prescribes it | **1 500 m** | At 140 kt IAS or less. Never at night |

> **8 km at and above 10 000 ft, 5 km below. Cloud: 1 500 m across, 1 000 ft up and down.**

# Reported ceiling for VFR without a clearance (CTR aerodrome, any ATZ or circuit)

**1 500 ft**

450 m

## Reported ground visibility, same cases

# 5 km

# Aerodrome minima: recap

| CUE | FIGURE | DETAIL |
|---|---|---|
| Reported ceiling for VFR without a clearance (CTR aerodrome, any ATZ or circuit) | **1 500 ft** | 450 m |
| Reported ground visibility, same cases | **5 km** | |

> **Aerodrome gate: 1 500 ft and 5 km.**

## Reported aerodrome ceiling at night

# 1 500 ft

450 m

## Night minimum level, elsewhere

# 1 000 ft

Above the highest obstacle within 8 km of your estimated position

## Night minimum level, high terrain or mountainous areas

# 2 000 ft

Above the highest obstacle within 8 km of your estimated position

# Night VFR: recap

| CUE | FIGURE | DETAIL |
|---|---|---|
| Reported aerodrome ceiling at night | **1 500 ft** | 450 m |
| Night minimum level, elsewhere | **1 000 ft** | Above the highest obstacle within 8 km of your estimated position |
| Night minimum level, high terrain or mountainous areas | **2 000 ft** | Above the highest obstacle within 8 km of your estimated position |

> **Night: ceiling 1 500 ft. Obstacles within 8 km: 1 000 ft, or 2 000 ft in the mountains.**

## No VFR above

# FL 195

Exceptions up to FL 285 with an ATS authorisation

## No VFR above FL 285 where 1 000 ft separation is applied above

# FL 290

## VFR speed limit below 10 000 ft AMSL, Classes C to G

# 250 kt IAS

# Upper limits and speed: recap

| CUE | FIGURE | DETAIL |
|---|---|---|
| No VFR above | **FL 195** | Exceptions up to FL 285 with an ATS authorisation |
| No VFR above FL 285 where 1 000 ft separation is applied above | **FL 290** | |
| VFR speed limit below 10 000 ft AMSL, Classes C to G | **250 kt IAS** | |

## Over a congested area or an open-air assembly of persons

# 1 000 ft

Above the highest obstacle within 600 m of the aircraft

## Elsewhere

# 500 ft

Above the ground or water, or the highest obstacle within 150 m of the aircraft

# Minimum heights: recap

| CUE | FIGURE | DETAIL |
|---|---|---|
| Over a congested area or an open-air assembly of persons | **1 000 ft** | Above the highest obstacle within 600 m of the aircraft |
| Elsewhere | **500 ft** | Above the ground or water, or the highest obstacle within 150 m of the aircraft |

> **Town: 1 000 over 600. Country: 500 over 150.**

## VFR cruising levels apply above

# 3 000 ft AGL

Above the ground or water, in level cruise

## Magnetic track 000°–179°

# FL 35, 55, 75

Odd thousands + 500 ft, up to FL 275

## Magnetic track 180°–359°

# FL 45, 65, 85

Even thousands + 500 ft, up to FL 285

# Cruising levels: recap

| CUE | FIGURE | DETAIL |
|---|---|---|
| VFR cruising levels apply above | **3 000 ft AGL** | Above the ground or water, in level cruise |
| Magnetic track 000°–179° | **FL 35, 55, 75** | Odd thousands + 500 ft, up to FL 275 |
| Magnetic track 180°–359° | **FL 45, 65, 85** | Even thousands + 500 ft, up to FL 285 |

> **East is odd: FL 35, 55, 75. West is even: FL 45, 65, 85.**

# Special VFR minimum flight visibility (aeroplanes)

# 1 500 m

Clear of cloud, surface in sight

## Special VFR maximum speed

# 140 kt IAS

## No special VFR take-off, landing or circuit below this reported ground visibility

# 1 500 m

## No special VFR take-off, landing or circuit below this reported ceiling

# 600 ft

180 m

# Special VFR: recap

| CUE | FIGURE | DETAIL |
|---|---|---|
| Special VFR minimum flight visibility (aeroplanes) | **1 500 m** | Clear of cloud, surface in sight |
| Special VFR maximum speed | **140 kt IAS** | |
| No special VFR take-off, landing or circuit below this reported ground visibility | **1 500 m** | |
| No special VFR take-off, landing or circuit below this reported ceiling | **600 ft** | 180 m |

> **Special VFR: 1 500 m and 140 kt in the air. 1 500 m and 600 ft on the ground.**

## Ceiling counts cloud layers below

# 20 000 ft

Lowest layer covering more than half the sky

Civil twilight ends when the centre of the sun is

# 6° below the horizon

# Definitions: recap

| CUE | FIGURE | DETAIL |
|---|---|---|
| Ceiling counts cloud layers below | **20 000 ft** | Lowest layer covering more than half the sky |
| Civil twilight ends when the centre of the sun is | **6° below the horizon** | |

## Portugal: magnetic track 270°–089°

# FL 45, 65, 85

Even thousands + 500 ft, above 3 000 ft over terrain or water

## Portugal: magnetic track 090°–269°

# FL 35, 55, 75

Odd thousands + 500 ft, above 3 000 ft over terrain or water

# Portugal (national): recap

| CUE | FIGURE | DETAIL |
|---|---|---|
| Portugal: magnetic track 270°–089° | **FL 45, 65, 85** | Even thousands + 500 ft, above 3 000 ft over terrain or water |
| Portugal: magnetic track 090°–269° | **FL 35, 55, 75** | Odd thousands + 500 ft, above 3 000 ft over terrain or water |

> **Portugal splits north and south: north is even, south is odd.**