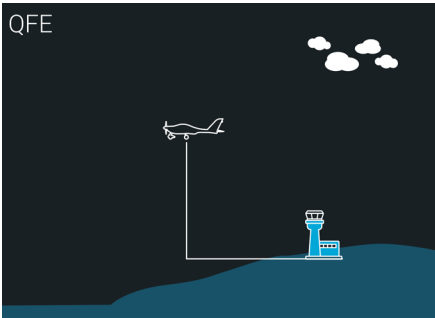


Avoiding airspace infringements

Key tips - Altimetry

A significant number of airspace infringements are caused by pilots using an incorrect altimeter setting. The pilot may believe that they are remaining outside notified airspace, but they are actually flying higher or lower.

QFE (the atmospheric pressure at aerodrome elevation)



When QFE is set, your altimeter will indicate your **height** above the elevation of the aerodrome.

This is useful in the visual circuit environment and in the ATZ.

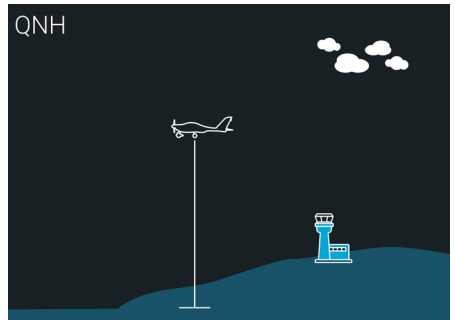
QFE should **not** be used elsewhere.

QNH (the atmospheric pressure at mean sea level)

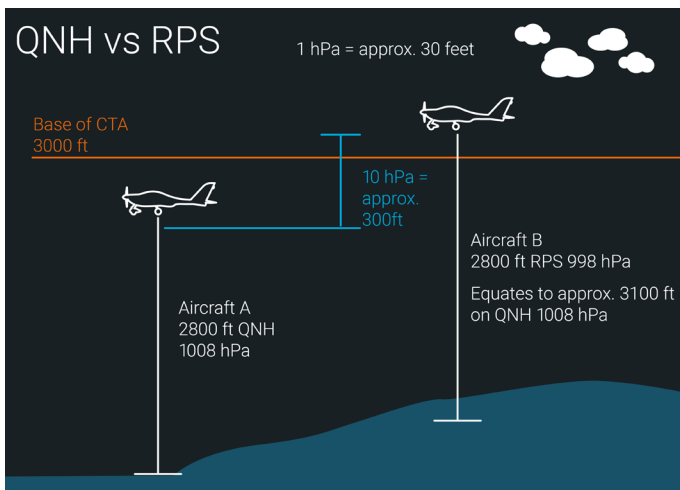
When QNH is set your altimeter will indicate your **altitude** above mean sea level.

When the Airfield QNH is set, the altimeter will indicate the elevation of the airfield correctly at the airfield reference point.

QNH is essential for avoiding airspace which has a base defined as an altitude, and any Prohibited, Restricted or Danger Areas that have an upper limit defined as an **altitude**.



When flying, remember to check (and update if necessary) the QNH value that you have set. This can easily be done by calling an ATSU or listening to ATIS or VOLMET broadcasts.



Regional Pressure Setting (RPS)

RPS is a forecast (not an actual) value of the lowest atmospheric pressure at mean sea level (MSL) within an Altimeter Setting Region (ASR).

- When an RPS is set your altimeter will indicate your **altitude** above the **forecast** setting.
- Aircraft using this setting will never be lower than the indicated altitude.

RPS were introduced in the past to aid terrain clearance in large areas where there was no local QNH reporting station, or where communications were poor.

Use of an RPS is the main cause of airspace infringements caused by incorrect altimeter setting.

RPS should not be used when operating below Controlled Airspace.

Standard Pressure Setting (SPS) 1013 hPa

- When SPS is set your altimeter will indicate **Flight Levels (FL)**.
- SPS should only be used when flying above the Transition Altitude. In the UK the Transition Altitude can vary. Check your chart and / or the AIP before you fly.

The SPS setting should be used when flying near to airspace with any level defined as a Flight Level.

At or below the Transition Altitude the QNH should be used for vertical reference.