

ANNEX

Status: EU Directives are being published on this site to aid cross referencing from UK legislation. After IP completion day (31 December 2020 11pm) no further amendments will be applied to this version.

Appendix B

Flight performance calculations

B3 VERTICAL PROFILES OF AIR TEMPERATURE, PRESSURE, DENSITY AND WINDSPEED

For the purposes of this document, the variations of temperature, pressure and density with height above mean sea level are taken to be those of the International Standard Atmosphere. The methodologies described below have been validated for aerodrome altitudes up to 4 000 ft above sea level and for air temperatures up to 43 °C (109 °F).

Although, in reality, mean wind velocity varies with both height and time, it is not usually practicable to take account of this for noise contour modelling purposes. Instead, the flight performance equations given below are based on the common assumption that the aeroplane is heading directly into a (default) headwind of 8 kt at all times — regardless of compass bearing (although no explicit account of mean wind velocity is taken in sound propagation calculations). Methods for adjusting the results for other headwind speeds are provided.