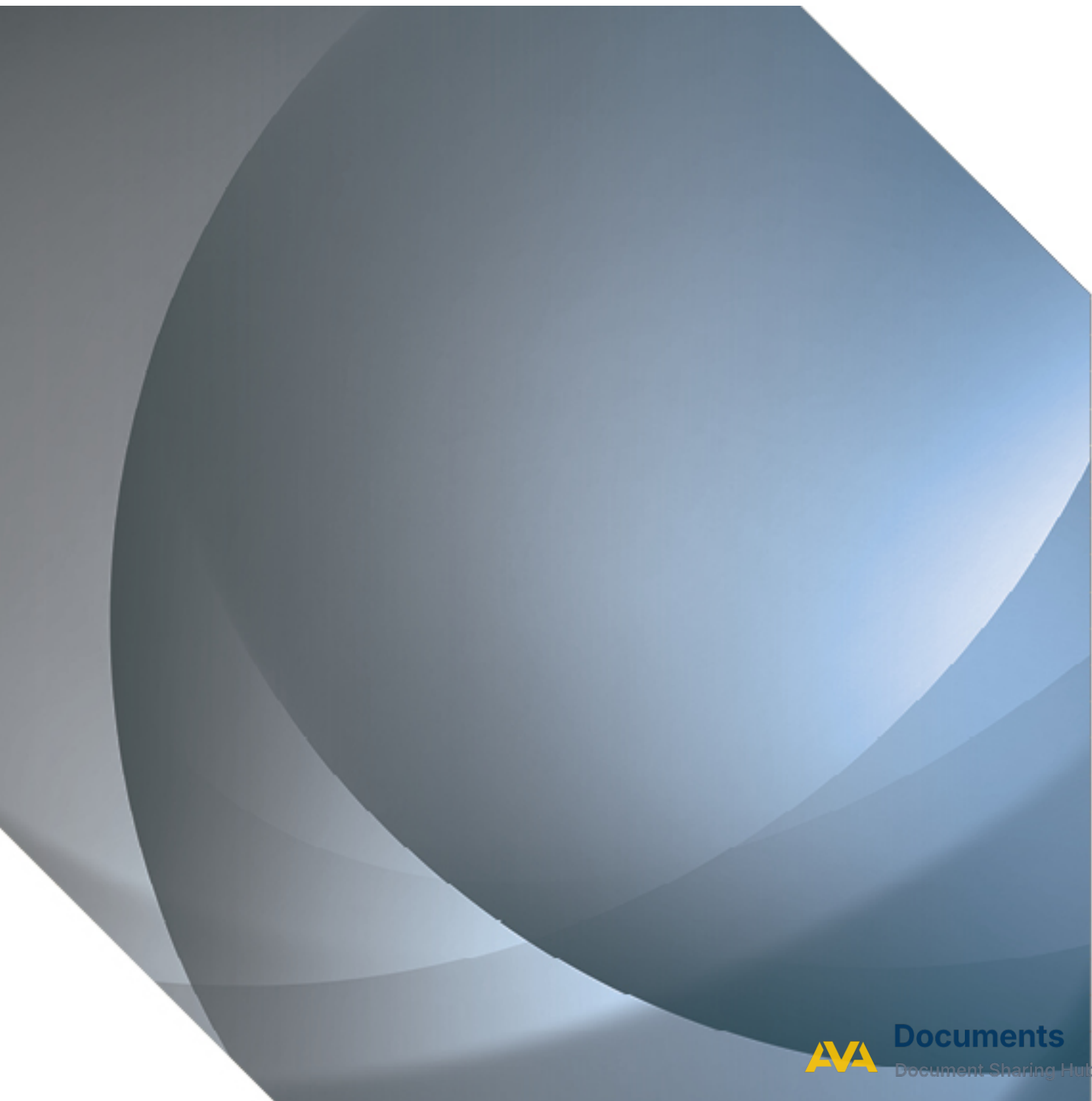


Units of Measurements in Civil Aviation

CAP 2264



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Chapter 1

Abbreviations and Definitions

Introduction

- 1.1 This document contains specifications for the use of a standardised system of units of measurement in international civil aviation air and ground operations in the UK. This standardised system of units of measurement is based on the International System of Units (SI) and certain non-SI units considered necessary to meet the specialised requirements of international civil aviation (for non-SI units see paragraph 1.6 below).
- 1.2 The International System of Units are developed and maintained by the General Conference of Weights and Measures (CGPM).
- 1.3 This document complements and gives additional guidance to that contained in the Units of Measurement Regulations (1986), as amended.

Meanings

- 1.4 When the following terms are used concerning the units of measurement, they have the following meanings:

Ampere (A). The fixed numerical value of the elementary charge e to be $1.602\,176\,634 \times 10^{-19}$ when expressed in Coulombs, which is equal to A s, where the second is defined by taking the unperturbed ground-state hyperfine transition frequency of the caesium-133 atom, to be 9 192 631 770 when expressed in the unit Hz, which is equal to s^{-1} .

Becquerel (Bq). The activity of a radionuclide having one spontaneous nuclear transition per second.

Candela (cd). The luminous intensity in a given direction. Defined by taking the fixed numerical value of the luminous efficacy of monochromatic radiation of frequency 540×10^{12} Hz, K_{cd} , to be 683 when expressed in the unit $lm\,W^{-1}$, which is equal to $cd\,sr\,W^{-1}$.

Celsius temperature ($t^{\circ}C$). The Celsius temperature is equal to the difference $t^{\circ}C = T - T_0$ between two thermodynamic temperatures T and T_0 where T_0 equals 273.15 kelvin.

Coulomb (C). The quantity of electricity transported in 1 second by a current of 1 ampere.

Degree Celsius ($^{\circ}C$). The special name for the unit kelvin for use in stating values of Celsius temperature, with $0^{\circ}C$ having a value of 273.16K.