

**Miscellaneous**

**No:** 1612

Civil Aviation Authority Act 1982

**Publication date:** 18 October 2024

**Opinion**

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**CAA Opinion: Safety Case for Aircraft Wake Turbulence Separation Scheme ‘RECAT-EU-PWS’**

**Background**

- 1) RECAT-EU-PWS (Pair-Wise) is a wake turbulence separation scheme developed by the European Organisation for the Safety of Air Navigation (known as EUROCONTROL). PWS establishes wake turbulence separation minima between specific aircraft types, rather than broad weight-based categories, permitting a safe reduction of the conservatism inherent to such categories.
- 2) The RECAT-EU-PWS scheme itself is a development of RECAT-EU; a scheme which recategorises the weight-based categories described within ICAO’s provisions for wake turbulence separation; see explanatory note 1.
- 3) The RECAT-EU and RECAT-EU-PWS safety cases developed by EUROCONTROL describe the methodology used to assess and mitigate wake turbulence encounter severity (which informs the definition of the separation minima), and provides the argument and evidence to satisfy the safety claim. The safety cases are intended to be approved by the State’s competent authority (e.g. the UK Civil Aviation Authority (the “CAA”)), with the air traffic services provider developing the local implementation safety case.
- 4) Supported by the CAA, the European Union Aviation Safety Agency (EASA) reviewed the RECAT-EU safety case in 2014. EASA confirmed that “the safety case report provides the assurance that the RECAT-EU wake turbulence separation scheme can be used by Member States as a basis to update current schemes”; see explanatory note 2. Deployment of RECAT-EU within the UK is currently based upon this EASA confirmation.
- 5) The CAA has undertaken an independent safety assurance review of the RECAT-EU-PWS safety case with a view to confirming that it provides appropriate safety assurance of the associated wake turbulence separation scheme.

**Legal Basis**

- 6) This Opinion is issued using Section 20(1) of the Civil Aviation Act 1982 (CAA 1982) which grants the CAA the “power to do anything which is calculated to facilitate, or is conducive or incidental to, the performance of any of its functions”.

- 7) This use of s.20(1) CAA 1982 in this opinion is calculated to facilitate the performance of the following CAA functions:
- a) Articles 2(1)(g) and 75(2)(a) of Assimilated Regulation (EU) 2018/1139 (the “UK Basic Regulation”) to formulate opinions on the provision of ATM/ANS in United Kingdom airspace, and the design, production, maintenance and operation of systems and constituents used in the provision of those ATM/ANS.
  - b) Part I of the Transport Act 2000, in which the CAA has functions relating to the licence and regulation of air traffic service providers and is required to exercise these functions so as to maintain a high standard of safety.

### **Opinion**

- 8) Having reviewed the RECAT-EU-PWS safety case developed by EUROCONTROL, the CAA, confirms that the safety case provides the assurance that the RECAT-EU-PWS wake turbulence separation scheme can be used by air traffic service providers certified by the CAA as a basis to update current schemes.
- 9) The CAA also intends to regularise the arrangements relating to the RECAT-EU safety case. As such, the CAA endorses the position first taken by EASA in 2014 that the RECAT-EU safety case provides the assurance that the associated wake turbulence separation scheme can be used by air traffic service providers certified by the CAA as a basis to update current schemes.
- 10) Air traffic services providers wishing to implement the RECAT-EU or RECAT-EU-PWS wake turbulence separation schemes are reminded of the requirements for the safety assessment and assurance of changes to the functional system detailed within Assimilated Regulation (EU) 2017/373 (the “UK ATM/ANS IR”).

### **Date in Force**

- 11) This opinion has effect from the date it is signed until further notice.

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for the Civil Aviation Authority

16 October 2024

### **Explanatory Note:**

1. International Civil Aviation Organisation (ICAO) Procedures for Air Navigation Services – Air Traffic Management (PANS-ATM) (Doc 4444).
2. Letter from EASA Executive Director to the EASA Management Board dated 10 October 2014.