

UK CAA Consultation on the Policy to Introduce a Harmonised Transition Altitude of 18000ft in the London and Scottish Flight Information Regions – implications for Airspace Users

The UK CAA Directorate of Airspace Policy published an Aviation Stakeholder Document in January 2012 titled: **Consultation on the Policy to Introduce a Harmonised Transition Altitude of 18000ft in the London and Scottish Flight Information Regions**. Below is a brief summary of the background, current situation, proposed change, implications for Airspace Users of the proposal and considerations following the consultation process.

The Transition Altitude (TA) is the altitude at or below which the vertical position of an aircraft is normally measured by reference to altitude (height above mean sea level). ICAO Doc 8168 PANS-OPS provides that a transition altitude shall normally be specified for each aerodrome by the State in which the aerodrome is located and that ‘the height above the aerodrome of the transition altitude shall be as low as possible but normally not less than 900 m (3000ft)’. PANS-OPS also provides that a transition altitude may be established for a specified area on the basis of regional air navigation agreements. The TA is therefore relative to elevation but based on sea level, and as it also protects traffic operating above it from terrain, local topography must be accounted for in its design. The principal objective of the TA is to enhance safety by providing the base to a common, or standard barometric pressure layer whereby all aircraft operating above it measure vertical position relative to the same standard altimeter setting (1013.25Hpa). TA’s currently in use in the UK were designed to accommodate the topography and performance of aircraft built in the 1950’s and 60’s. The topography has changed little since then, however performance has and the time taken to reach, and typical cruising levels above the TA are very different today. The TA across the UK varies from 3000ft amsl in the Open FIR to 6000ft amsl in the London and Scottish FIR’s; these regional variations create confusion and potential risk in congested airspace and for high performance aircraft, the additional workload created by the need to change altimeter settings quickly due to low TA’s has the potential for continued safety implications if not resolved.

The UK CAA proposes that the Transition Altitude is raised to 18000ft amsl across both London and Scottish FIR’s. This proposal is in line with the EASA SES/SESAR Harmonised European Transition Altitude Programme (HETA) (see A-NPA 2012-01) which seeks to standardise the TA across EU States at 10000ft or higher. Advantages of a higher TA for Airspace Users will be **improved continuous climb/descent profiles** resulting in cost and environmental savings for operators, **greater efficiencies in airspace design** creating increased capacity and fewer delays, and **simpler Standard Operating Procedures** for aircrew, enhancing safety by reducing distraction and ‘heads down’ cockpit tasks. Disadvantages are that, as a buffer must be created around the TA to mitigate the risk of potential conflicts through barometric pressure differences, FL190 will no longer be available as a tactical level for planning purposes, meaning that operators normally planning to cruise between FL180 and FL200 will now have to choose between 18000ft and FL210. This should not be a problem however as there are relatively few operations utilising those levels. Another consideration must be that if implemented prior to HETA, a fragmented TA environment will exist between the UK and near EU State FIR’s which may necessitate small changes in level/altitude to accommodate changes crossing FIR Boundaries until HETA is realised.

Following the consultation period, UK CAA reported that of the 52 stakeholder respondents, 71% did not oppose the proposed changes however, although there was broad support for the proposal amongst that group, concern was expressed with regard to implementation costs (training and changes to SOP’s



for operators) and timelines. There were also suggestions in favour of an interim level until wider HETA deployment.

UK CAA had planned to implement changes by winter 2013/14, subject to satisfactory stakeholder consultation and all requisite safety assessments, however the target date has been postponed in favour of a second consultation process planned for November 2015 until February 2016.

UPDATE: 2 FEBRUARY 2015

EASA recently held an HETA Workgroup and it has been determined that:

- HETA deployment will **not** now be achieved
- No regulatory provisions within EASA States will be established, and
- Workshops are expected to be held later this year to further elaborate.

Clearly, this decision will have ramifications for the UK CAA proposals with respect to a complimentary plan to HETA and any developments will be reported here.

