



**Future
Airspace
Strategy
VFR
Implementation
Group**

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FASVIG Response to Transition Altitude Second Consultation

The decision made from the first consultation, to raise the Transition Altitude (TA) to 18,000ft, has resulted in actual QNH to be used throughout a very large volume of airspace, including en-route CAS below the new TA, which was previously all at standard setting flight level.

NATS has proposed that this should be the actual QNH at the start of each half hour METAR report, taken from the nominated aerodrome for each of the proposed Altimeter Setting Regions (ASR) in which each sector of CAS is. These new regions, very different from the current regions, are large to minimise altimeter setting changes for fast commercial aircraft. For example, Avon ASR extends about 200NM from close to the North Wales coast down to the FIR boundary with the Channel Islands TMA.

The interest of FASVIG is in achieving simple altimetry practice for VFR flight outside CAS. Where VFR flight is permitted in CAS, the required altimeter setting will be given with the clearance to enter.

We fully support the removal of the current forecast Regional Pressure Settings. It adds an undesirable complexity to pilots, and directly contributes to a percentage of airspace infringements through the base of CAS. We understand that no other country in the world uses such a system.

We consider that flight in Class G should use a reasonably local appropriate QNH, and that the new ASR settings are not in general appropriate. The consultation recognises that the proposed ASR settings worsens the current situation in introducing the possibility of it resulting in infringement of the upper level of CAS or other restricted areas, ATZs, MATZs etc., because the ASR setting can be either greater or less than the local. This has caused no problem to date with normal current practice of using actual QNH from an appropriate aerodrome.

The consultation has dealt with this risk of infringement from above when using ASR settings by recommending an increased margin of altitude to be applied when far from the station giving the ASR setting. By applying this to deal with infringements from below would enable pilots in Class G on a local setting to ensure such separation without needing to use an ASR setting.



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In practice, use of an ASR setting when flying in Class G will be very rare, and the Pilot Operating Procedures should reflect this. There is an extremely wide range of aircraft types, types of mission, and pilot experience and qualifications using Class G, but virtually all combinations of these are best served by using a QNH from a station within 50NM for one of the following:

- Retaining departure setting for flights returning to departure point.
- Retaining departure setting until receiving destination setting.
- Using another aerodrome setting when passing en-route or obtained from the FIS controller.
- Receiving an ATSOCAS service, whether or not from a LARS station, when the aerodrome radar will be set to that aerodrome's QNH for interpreting a Mode C transponder return, and surely the ATCO would want aircraft being given the service to be on the same QNH as that of the radar.

This is consistent with the FAA recommendation, which also recommends one close to track up to 100NM away if one within 50NM is not available.

In Class G the pilots only need to know the QNH of the station they talk to; this should always be the aerodrome QNH. This should apply whatever service is being received. When not speaking to an ATSP, pilots continue on the last known setting.

The boundaries of the ASRs have no value outside the lateral limits of CAS, and if shown on charts, should be confined to those limits.

Pilot Operating Procedures should recommend that ASRs are not used unless flying close to the base of CAS, and not then when observing the suggested increased margin to be allowed. ASR settings should not normally be given to aircraft in class G unless requested, apart from when below a TMA or CTA or when being handled by an area controller. By way of example, North Wales is nearly all in Avon ASR, about 100NM from Cardiff, but aircraft there should always be using a more local QNH.

Area FIS Controllers should have the current METAR lists on view, to be able to give QNH of any reporting station to pilots requesting it. We recognise the value of AUTO METAR reports from closed aerodromes, particularly from military aerodromes closed at weekends.



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We would note that pressure altimetry is rapidly becoming irrelevant for terrain clearance. RNAV(GNSS) equipment is now very widespread in GA aircraft flown IFR, is approved for public transport. The implementation of EGNOS in 2011, enables certified sets with WAAS to have the height accurate normally to less than 10ft for the display of glide slope for precision LPV approaches, which are rapidly being introduced into the UK. Simpler equipment of good accuracy, also WAAS enabled, is commonly used in light aircraft, including microlights. We are surprised that the MOD seeks to retain for their own purposes forecast regional settings. The big variations from actual QNH could compromise separation in the required IFR cruising levels. The differences between pressure alt and true alt. caused by temperature variation are normally small at altitudes most commonly used for VFR flight.

We recommend research into the accuracy of non-certified WAAS enabled GPS equipment designed for aviation use, to determine whether for private VFR flight in Class G the altitude given is suitable for altimeter setting when flying without contact with a ground station.

We recognise the concerns of PPL/IR on the large changes in level when crossing FIR boundaries to the continent where the TA is much lower. Similar, though perhaps somewhat lesser, concern applies to VFR flights. By way of example, many of such flights are from below the Worthing CTA, base 7,500ft or 6,500 ft, to the Paris FIR, TA 5000ft. Those wishing to fly in the VFR levels there, whether or not in the Class E airways, may need such a similar height change if above the Paris TA. However, as the CAA have obtained exemption from the SERA required VFR cruising levels, an aircraft going to France could adjust to standard setting before leaving UK airspace. This still leaves valid the concerns of meeting head on or from above/below IFR traffic adjusting its required level. We agree that CONOPS must contain recommended procedures for this.

Concern has been expressed at the loss of Class G airspace in high pressure good flying weather, when the base of CAS determined by flight level can be significantly higher. There is little compensation for this when pressure is low as conditions then are so often unsuitable for VFR flight. We understand that raising the TA and other changes in procedures, will enable release of some lower levels of CAS which will be most welcome.



About FASVIG

Established in January 2014, the Future Airspace Strategy VFR Implementation Group (FASVIG) is a joint undertaking between Sports and Recreational Aviation and Military Aviation stakeholders, CAA, NATS, business aviation and other aviation industry stakeholders, which aims to improve the efficiency and effectiveness of VFR operations in the UKFIR. FASVIG is part of the CAA Future Airspace Strategy (FAS).

The FASVIG Vision

The FASVIG Vision is to provide safe, efficient airspace, that has the capacity to meet reasonable demand, balances the needs of all users and mitigates the impact of aviation on the environment. The FAS captures the benefits of modernising the airspace system in the areas of safety, capacity, environment and cost. In a written statement to Parliament on 6 Nov 13 the Minister for Transport said: General Aviation can and should contribute to the UK's economic success, whilst providing a safe environment for participants and the public. The Government's aim is therefore to make the UK the best country in the world for general aviation. The objective of FASVIG is "to provide a sustainable future for VFR operations".

VFR Implementation Programme & Deployment Plan

FASVIG aims to work in partnership towards developing a jointly agreed implementation plan which will address technology, procedures, airspace changes and associated policy framework to deliver the improvements to safety, capacity, environmental performance and airspace efficiency of VFR operations required by the FAS. The FASVIG aims to deliver a set of tangible benefits within the 2016-2020 timescale or earlier where possible. The FASVIG will provide governance, direction and resources to sub groups which will be undertaking significant workstreams.