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AIRSPACE SPEED LIMITS

1 Introduction

1.1 Recent observations indicate that some general confusion and misunderstanding may exist in the application of Airspace Speed Limits and other speed limits included in ATC procedures, and also in the discretion of ATC to de-restrict such speed limits. This Circular details the purpose and application of the speed limits.

2 Airspace Speed Limits

2.1 The ICAO Airspace Classification System, implemented in November 1991, introduced the concept of an **AIRSPACE** speed limit of 250 kt IAS for aircraft below FL 100 in Class D, E, F and G Airspace and for VFR flights in Class C Airspace. (See ICAO Annex 11 Appendix 4 and UK Differences at UK AIP GEN 1-7-35).

2.2 The purpose of the speed limit is to enable the 'see and avoid' principle to remain effective for the avoidance of collisions between IFR and VFR flights where separation is not established by ATC.

2.3 In all cases ATC provides separation between all aircraft in Class A and B Airspace and to all IFR flights from all others in Class C Airspace. An airspace speed limit for 'see and avoid' purposes is not necessary for these flights.

2.4 Relaxation of Airspace Speed Limits by ATC

2.4.1 Where a 'known traffic environment' exists (ie all aircraft within the airspace are known to and are under the jurisdiction of ATC, for example as in Class D Airspace) the conflict between flights may be resolved by ATC using methods other than 'see and avoid' or, alternatively, ATC will be aware when no conflict exists. In these circumstances ATC may authorise relaxation of the airspace speed limit dependant on the tactical traffic situation, **except** where the aircraft will subsequently be transiting into an airspace in which the speed limit cannot be relaxed by ATC (see paragraph 2.4.2).

2.4.2 In class E, F and G Airspace **conflicting traffic may not be known to ATC**. Therefore the 'see and avoid' principle remains necessary for all flights. In order to sustain an acceptable capability for pilots to achieve collision avoidance, ATC shall not authorise a relaxation of the airspace speed limit.

3 Procedure Speed Limits

3.1 Certain published ATC procedures for IFR flights (normally Standard Instrument Departure and Arrival procedures) include a speed limit as part of the procedure in addition to any airspace speed limits that may apply. These speed limits are to assist in maintaining ATC separation between successive aircraft and reduce ATC co-ordination. **They are also Procedure Design Speeds which ensure obstacle clearance.** Procedure speed limits may apply to procedures in airspace which does not otherwise have an airspace speed limit (ie Class A and B Airspace).

3.2 Procedure speed limits on departure procedures may be relaxed by ATC once separation between aircraft **and the required obstacle clearance** is assured by other methods. In relaxing these speed limits ATC must also ensure that any applicable airspace speed limit requirements have also been adequately resolved (see paragraph 2.4).

3.3 Where a non-standard speed limit is notified for a holding pattern this is to ensure separation from adjacent holding patterns/procedures or for controlled airspace containment. ATC should not relax these speed limits unless, exceptionally, separation or containment is assured by other methods such as continuous radar monitoring.

3.4 Speed limits specified in Instrument Approach Procedures are for obstacle clearance purposes and will not be relaxed by ATC.

3.5 Phraseology

3.5.1 Pilots should be aware that ATC use of the phrase '**No ATC Speed Restriction**' does not absolve pilots from the responsibility to operate at speeds that would:

- (a) Ensure adequate obstacle clearance;
- (b) comply with flight operations manual requirements;
- (c) not prejudice the 'see and avoid' principle (for both conflicting parties);
- (d) comply with the airspace speed limit in Class E, F or G Airspace;
- (e) enable adherence to tracks and levels specified in Noise Preferential Routes or Noise Abatement Procedures (including Continuous Descent Approaches).

4 Tactical Application of Speed Control by ATC

4.1 In busy traffic situations it is necessary for ATC to limit aircraft speeds for traffic sequencing purposes and reduce the need for radar vectoring. Controllers will consider aircraft performance limitations in issuing speed instructions. Specific speeds should normally be expressed in multiples of 10 kt.

4.2 Only minor speed adjustments of not more than ± 20 kt should be requested of an aircraft established on intermediate or final approach. Speed control should not be applied within 4 nm of the threshold on final approach.

4.3 Aircraft unable to conform to the speeds specified by the radar controller should inform the controller immediately and state the speeds which will be used.

5 Flights Exempt from the Airspace Speed Limit

5.1 The **Airspace** Speed Limit does not apply to certain types of flight in the subject airspace as detailed in Rule 23(3) of the Rules of the Air Regulations 1996. These include:

aircraft participating in air displays (subject to conditions specified in the air display organiser's Permission and the pilot's display authorisation); aircraft operating in accordance with Schedule 2 of the Air Navigation Order; and military aircraft operating as OAT. **Unless otherwise authorised by ATC, any appropriate procedure speed limits will still apply.**

5.2 Additionally particular aircraft types or individual aircraft which cannot comply for airworthiness reasons, may be granted Permission by the Authority to exceed the airspace speed limit. Unless otherwise authorised by ATC any appropriate procedure speed limits will still apply.

5.2.1 The principal aircraft types involved will be certain historic jet and non-jet types operating under VFR (with enhanced minimum weather conditions specified to preserve the 'see and avoid' principle).

5.3 Focal Point for Permissions

5.3.1 The focal point for the issue of Rule 23 Permissions in respect of the Airspace Speed Limit is:

- (a) Flight Operations Policy Department for 'Heavy' aircraft;
- (b) General Aviation Department for General Aviation activity including air display authorisations.

5.3.2 Where necessary the Directorate of Airspace Policy and relevant ATS providers will be consulted and any Permissions granted will take account of the application of the 'see and avoid' principle and any procedure speed limits likely to be encountered.

This Circular is issued for information, guidance and necessary action.