

Comment Response Document

NPA 22B-73 Stall Warning

Comments received:

- LBA
- CAA UK
- CAA Monaco
- MOT-Austria
- DGAC France

Review of Comments

Four commentators had no comments to offer. They agreed or accepted the proposal.

CAA UK objected that the proposed technique could generate problems during the flight test activity because of the difficulty of exactly maintaining the appropriate rearward stick movement required to obtain the rate of 2 Km/h per second of speed reduction. In addition it was underlined by CAA UK that there was no hard evidence that, for a given rate of speed reduction, the stalling characteristics are linear with time, as it is assumed by ENAC proposal.

As an alternative, CAA UK proposed a different method based on the approach used for JAR 25 aircraft (see NPA 25B-215); this method enables a more precise determination of the stalling speed.

The Group acknowledged that the method proposed by CAA UK was technically correct and more precise. Nevertheless it was felt by the Group members that the current JAR 22 requirements were based on a more qualitative approach which did not require specific test instrumentation and complex testing procedures. This qualitative approach had been always considered adequate for this class of aircraft taking also into consideration the kind of operation for which they are designed.

From this point of view the ENAC proposal was considered an adequate alternative to the current requirements for sailplanes with a wing section characterised by a flat CL versus angle of attack curve.

It was also agreed that the CAA UK comment about the difficulty in maintaining the required rate of speed reduction was also applicable to the current JAR 22.201 requirement where the problem had been already addressed by the word „approximately“. Therefore, for consistency reason, the same word was agreed to be introduced in the ENAC proposal. In this way the Group felt it was also possible to take into account any non linearity which can be inherent to the stalling characteristics.