

Comment Response Document

NPA 22B-65

Justification

The historical basis for the qualification requirement in JAR 22.51 is LFSM, Issue Oct. 1975 and OSTIV Airworthiness Standards, Issue Sept. 1976. They specify only a take-off distance of 600 m when taking off from a grass surface to attaining a height of 15 m. The take-off requirement of 500 m for hard surfaces was introduced later into JAR 22. This produced the situation that for a particular manufacturer and a powered sailplane the requirement for the grass runway could be met but not the hard runway requirement, leaving the manufacturer with a dilemma. In addition, it is difficult to obtain consistent and repeatable results from grass runways due to the influence of various parameters as the length of the grass, the state of the surface, the water content of the grass runway, etc. It was therefore considered that the deletion of the qualification take-off requirement of 600 m for grass the surface, and the continuation of the hard runway requirement will provide a repeatable method of performance qualification testing. Whilst this requirement now guarantees a minimum take-off performance for hard runways, operation of powered sailplanes is mostly from grass runways. Therefore the take-off distances from hard and grass surfaces, determined under the conditions of JAR 22.51, must be provided to the pilot in the AFM. This amendment to the requirements will have zero cost impact to the manufacturer.

After circulation of the NPA to the JSA and NPA Scheme Subscribers 6 comments were received.

Comments received

- JAA Regulation Committee (3 comments)
- BAZ
- CAA Denmark
- GAMA/Raytheon

Review of comments:

Three commenters had no comments to offer and two of them recommended the NPA progression through the JAA system.

The three remaining commenters criticized the use of the word "anomalous" used in the justification, because in most operational cases powered sailplanes will take off from grass runways, so it is far-off being an anomalous situation (requirement). For clarification of the intent of the proposal, the justification was changed and expanded accordingly.

One commenter recommended the addition of an ACJ to JAR 22.51 to define the general characteristics of what grass surface is to be considered, when showing compliance with this requirement. The study groups position is that JAR 22.51 now only relates to hard

surfaces as a qualification requirement, therefore an ACJ dealing with grass surfaces is not necessary.

One commenter criticized the proposed change of JAR 22.1585(f). For clarification the NPA wording of this paragraph was changed and expanded accordingly.

One commenter was of the opinion that JAR 22.51 is "overstressed" by the double requirement 500 m / 600 m, so that the latter should be deleted, following the NPA. In addition, an ACJ to JAR 22.51 should be introduced to advise manufacturers to include additional information in the AFM, for take-off conditions which deviate from those prescribed in JAR 22.45, 22.51 (wind, altitude, temperature, runway surface conditions, etc.). The study group's position is that JAR 22.51 is the wrong place to state information related to the AFM; this should be provided under JAR 22.1585. Information about the additional conditions requested by the commenter is not required at the present by JAR 22, and should be the subject of a new NPA. The Regulation Committee should advise the study group to pursue this as a new NPA, if they consider that this information should form part of the requirements.

One commenter argued that NPA's may be sponsored only by European bodies or National Authorities - which is, in his opinion, not the case here. The commenter's assumption is not correct, the sponsor of this NPA being the AECMA coordinator for the S & PS SG (GROB).