§ 23.302  Canard or tandem wing configurations.

The forward structure of a canard or tandem wing configuration must:
(a) Meet all requirements of subpart C and subpart D of this part applicable to a wing; and
(b) Meet all requirements applicable to the function performed by these surfaces.

[Amend. 23–42, 56 FR 332, Jan. 3, 1991]

§ 23.303  Factor of safety.

Unless otherwise provided, a factor of safety of 1.5 must be used.

§ 23.305  Strength and deformation.

(a) The structure must be able to support limit loads without detrimental, permanent deformation. At any load up to limit loads, the deformation may not interfere with safe operation.
(b) The structure must be able to support ultimate loads without failure for at least three seconds, except local failures or structural instabilities between limit and ultimate load are acceptable only if the structure can sustain the required ultimate load for at least three seconds. However when proof of strength is shown by dynamic tests simulating actual load conditions, the three second limit does not apply.

[Doc. No. 4080, 29 FR 17955, Dec. 18, 1964, as amended by Amdt. 23–45, 58 FR 42160, Aug. 6, 1993]

§ 23.307  Proof of structure.

(a) Compliance with the strength and deformation requirements of §23.305 must be shown for each critical load condition. Structural analysis may be used only if the structure conforms to those for which experience has shown this method to be reliable. In other cases, substantiating load tests must be made. Dynamic tests, including structural flight tests, are acceptable if the design load conditions have been simulated.
(b) Certain parts of the structure must be tested as specified in Subpart D of this part.