

Aerostar (Piper/Ted Smith) 600 and 700 Series Aeroplanes

AD/TSA-600/32
Amdt 3

Flap and C of G Restrictions

12/84

Applicability: All Piper models PA-60-600, PA-60-601, PA-60-601P and PA-60-602P and Aerostar models 600, 601, 601P and 602P.

Requirement: Case 1. For an aircraft not fitted with a modification aimed at removing previously imposed flap and C of G restrictions.

a. Remove any placard fitted in accordance with the original issue of this Directive.

b. Fabricate and install a placard in full view of the pilot stating:

“FLAPS MAY BE EXTENDED ONLY IF C OF G IS LESS THAN 4140mm AFT OF DATUM. FLAPS SHALL NOT BE EXTENDED IF C OF G IS MORE THAN 4140mm AFT OF DATUM. LANDING DISTANCE WILL BE INCREASED WITHOUT FLAPS. REFER TO APPROVED FLIGHT MANUAL FOR PERFORMANCE INFORMATION.”

Case 2. For an aircraft fitted with Piper Modification Kit 764969V. Remove any placard fitted in accordance with any issue of this Directive.

Case 3. For an aircraft fitted with Machen Inc. Stall Improvement Kit (STC SA 2143NM). Remove any placard fitted in accordance with any issue of this Directive.

Note 1: Piper Modification 764969V is not approved for aircraft with aerodynamic or power increase modifications.

Note 2: FAA AD 83-14-07 R3 amendment 39-4759 refers.

Note 3: A flight manual amendment was issued concurrently with amendment 1 of this Directive to cover Case 1, and separate flight manual amendments are available to cover Case 2 and Case 3.

Compliance: Case 1 - within 100 hours time in service after 31 October 1983.

Case 2 - optional.

Case 3 - optional.

Background: When handling deficiencies (loss of yaw and roll control occurring in incipient power-on stalls with flaps extended and C of G near to aft limit) were highlighted, the FAA imposed an aft C of G limit of 4216mm and prohibited the use of flaps.

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This restriction was subsequently eased allowing the use of flaps for C of G ahead of a point 4140mm aft of datum, flaps still being prohibited for C of G between 4140mm and 4216mm aft of datum, with a maximum aft limit of 4216mm aft of datum being retained.

Subsequently, for aircraft fitted with either Piper or Machen kits, the FAA has approved the use of flaps for all C of G locations within the approved C of G range (aft limit of 4216 mm for the Piper Kit, aft limit of 4264 mm for the Machen Kit).

This Amendment authorises the Machen (STC SA 2143 NM) Kit as a means of removing the flap restrictions imposed by the original issue.