

5.1 Introduction

If control surfaces have been repaired or re-finished, it is essential to check whether their mass (weight) and residual mass moments are still within the permissible limits. If it is found that these limits are exceeded, contact Messrs. Schleicher for further directions.

Further, the distribution of the mass balance over the span of control surfaces must be maintained. If it is found that repairs alter the local residual mass moment, the original residual mass moment must be re-gained by fitting any additional mass balance weight **in the same location** where the moment has been altered due to the repair.

5.2 Table of Control Surface Masses and Tailheavy (residual Mass) Moments

The permissible masses of control surfaces and their residual mass moments are:

	Mass [kg]	Residual mass moment [daNmm]
Rudder	4.00 - 5.10	0 - 33
Elevator, left	0.95 - 1.25	5 - 12.5
Elevator, right	0.95 - 1.25	5 - 12.5
Elevator - Actuator	0.34 - 0.42	14 - 20
Aileron, left	2.90 - 3.60	0 - 16
Aileron, right	2.90 - 3.60	0 - 16

	Mass [lbs.]	Residual mass moment [in.lbs.]
Rudder	8.82 - 11.24	0 - 2.92
Elevator, left	2.09 - 2.76	0.44 - 1.11
Elevator, right	2.09 - 2.76	0.44 - 1.11
Elevator - Actuator	0.75 - 0.93	1.24 - 1.77
Aileron, left	6.39 - 7.94	0 - 1.42
Aileron, right	6.39 - 7.94	0 - 1.42