6.1 Flight Control Travel Limits

Elevator: Up 25° to 30°

Down 22° to 26°

Rudder: To both sides 26° to 28°

Aileron: with flap position -5:

Up -18° to -22°

Down 5° to 10°

For easier checking, measured angles may be converted to mm/in deflection values, using the actual local radius of the defined measuring place. See also table page 6-3 or deflections report of final production inspection.

Flap: with aileron in neutral position:

at flap position "L" 13° to 15°
"10" 8° to 10°
"5" 3° to 5°
"0" -2° to 0°
"-5" -5° to -3°

Air Brake: with flap at high speed stop between flap positions "0" and "5": minimum average 120 mm [4.72 in]
with flap position "L": minimum average 150 mm [5.91 in]

6.2 Control Surface Weight and Mass Balance

(Should be inspected when suspecting changes of mass / weight and after repairs)

Weight and mass balance should be within given limits for safety against flutter.

Serial No.: _____

	Mass/Weight	Hor. Ref. Line	Hinge Moment
Elevator <*>	1.00 to 1.60 kg 2.21 to 3.53 lbs	Straight region of upper side	
Rudder	3.00 to 6.80 kg 6.61 to 14.99 lbs	Centerline of section	0 to 8.20 kgcm 0 to 113.88 in oz
Inner Flaperon	2.14 to 2.74 kg 4.72 to 6.04 lbs	Leading and trailing edges of under side connected	8.06 to 9.00 kgcm 111.93 to 124.99 in oz
Middle Flaperon incl. connecting pins	1.19 to 1.53 kg 2.62 to 3.37 lbs		3.60 to 4.75 kgcm 49.99 to 65.97 in oz
18m Flaperon including connecting pins	0.34 to 0.50 kg 0.75 to 1.10 lbs		0.51 to 1.00 kgcm 7.08 to 13.89 in oz

<*> Elevator hinge moment limits are not absolutely fixed, they are determined during final production inspection and then entered.

Details for measuring technique of hinge moment and repairs see page 6-2 !

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