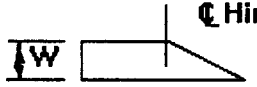
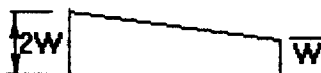
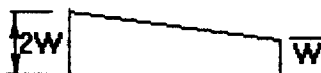


**Table 2 - Average limit control surface loading**

**AVERAGE LIMIT CONTROL SURFACE LOADING**

<b>SURFACE</b>	<b>DIRECTION OF LOADING</b>	<b>MAGNITUDE OF LOADING</b>	<b>CHORDWISE DISTRIBUTION</b>
<b>Horizontal Tail I</b>	a) Up and Down	Figure A5 Curve (2)	See Figure A7
	b) Unsymmetrical Loading (Up and Down)	100% $\bar{w}$ on one side of airplane $\mathcal{C}$ 65% $\bar{w}$ on other side of airplane $\mathcal{C}$ for normal and utility categories. For acrobatic category see A23.11(c)	
<b>Vertical Tail II</b>	Right and Left	Figure A5 Curve (1)	Same as above
<b>Aileron III</b>	a) Up and Down	Figure A6 Curve (5)	(C)  $\mathcal{C}$ Hinge
	b) Down	.25 x Up Load (a)	(D) 
<b>Wing Flap IV</b>	a) Up	Figure A6 Curve (4)	(D) 
	b) Down	.25 x Up Load (a)	
<b>Trim Tab V</b>	a) Up and Down	Figure A6 Curve (3)	Same as (D) above

**NOTE: The surface loading I, II, III, and V above are based on speeds  $V_A$  min and  $V_C$  min.**

The loading of IV is based on  $V_F$  min.

If values of speed greater than these minimums are selected for design, the appropriate surface loadings must be multiplied by the ratio  $\left(\frac{V_{\text{selected}}}{V_{\text{minimum}}}\right)^2$ .

For conditions I, II, III, and V the multiplying factor used must be the higher of

$$\left(\frac{V_A \text{ sel.}}{V_A \text{ min.}}\right)^2 \text{ or } \left(\frac{V_C \text{ sel.}}{V_C \text{ min.}}\right)^2$$