**Applied Compressive Load**

Calculations for the maximum compressive load the rocket can handle given its dimensions are as follows:

Where, is the maximum load on the rocket tube

D is the rocket diameter

t is thickness of the rocket tube

**The actual applied load:** (calculated at max Q)

The load applied is less than the maximum load the rocket tube can handle. The rocket is thus safe from compression loads during flight.

**Maximum Buckling Loads (that the airframe can handle)**

Where is the conical semi-angle.

Coefficient of drag on Nose and Body Tube

Base Drag Coefficient

Fin Drag Coefficient

Intermediate Drag Coefficient

Total Drag Coefficient