Determine allowable force if weight is NOT neglected						
Given:			Length, in	Weight, lb	allowable applied normal force (including wt)	
Diameter, in	0.25		0	0	5877.920	
Area, in^2	0.049087		0.1	0.001389173	5877.918	
Shear stress, ksi	59.872		0.2	0.002778346	5877.917	
normal stress, psi	119744		0.3	0.004167519	5877.916	
Density, lb/in^3	0.283		0.4	0.005556692	5877.914	
			0.5	0.006945865	5877.913	
F=NormalStress*Area - Weight			0.6	0.008335038	5877.912	
			0.7	0.009724211	5877.910	
			0.8	0.011113384	5877.909	
			0.9	0.012502557	5877.907	
			1	0.01389173	5877.906	
			1.1	0.015280903	5877.905	
			1.2	0.016670076	5877.903	
			1.3	0.018059249	5877.902	
			1.4	0.019448422	5877.900	
			1.5	0.020837595	5877.899	
			1.6	0.022226768	5877.898	
			3.1	0.043064363	5877.877	
			3.2	0.044453536	5877.875	
			3.3	0.045842709	5877.874	
			3.4	0.047231882	5877.873	
			3.5	0.048621055	5877.871	
			3.6	0.050010228	5877.870	
			3.7	0.051399401	5877.868	
			3.8	0.052788574	5877.867	
			3.9	0.054177747	5877.866	
			4	0.05556692	5877.864