

**SERIES 103**



# Aircraft Utilization Analysis

Comparison of ArmorLite® Composite to standard A-A-59569 Ni/Cu Braid

Length and Weight of NiCu Braid in Typical Commercial Carrier			
Diameter (in)	Weight (Lb/ft)	Length (in)	weight (Lb)
0 - 0.25	0.02	12564.8	21.08
0.25 - 0.5	0.05	5259.3	21.17
0.5 - 0.75	0.07	1212.6	7.12
0.75 - 1.0	0.14	1437.4	16.88
1.0 - 1.5	0.18	467	7.05
<b>Total weight</b>			<b>73.3</b>

Weight Savings Using ArmorLite™ (Equivalent Lengths)				
Diameter (in)	Weight (Lb/ft)	Length (in)	Length in feet	weight (Lb)
0 - 0.25	.00507	12564.8	1047.07	5.309
0.25 - 0.5	.0097	5259.3	438.28	4.251
0.5 - 0.75	.0178	1212.6	101.05	1.737
0.75 - 1.0	.0256	1437.4	119.78	3.063
1.0 - 1.5	.0368	467	38.92	1.434
<b>Total weight</b>				<b>15.794</b>

Aircraft Zone Typical Braid Utilization (length in inches)								
L Wing	R Wing	Fwd Belly	Aft Belly	HYD Bay	Aft Barrel	Tail	V/H Stab	Totals
1852.2	1852.2	0	2811.4	168.2	2015.2	2480.6	1385	<b>12564.8</b>
434.8	434.8	511.6	1034.6	257.4	506.2	958.2	1121.7	<b>5259.3</b>
0	0	260.9	223	0	184.2	392.4	152.1	<b>1212.6</b>
0	0	77.2	0	0	1198	162.2	0	<b>1437.4</b>
0	0	0	0	0	446	21	0	<b>467</b>

**Using ArmorLite™ in place of standard nickel-copper braid saves 54.6 pounds**