



BRIGHAM YOUNG UNIVERSITY
AUVSI CAPSTONE TEAM (TEAM 45)

Airframe Subsystem Requirements Matrix

ID	Rev.	Date	Description	Author	Checked By
AF-001	0.1	10-23-18	Initial Draft	Tyler Critchfield & Ryan Anderson	Derek Knowles
AF-001	0.2	11-06-18	Revisions for Final Submis- sion	Tyler Critchfield	Ryan Anderson & Kameron Eves

Airframe Subsystem Requirements Matrix

Product: UAS Subsystem: Airframe																	
Market Requirements								Performance Measures		Units							
								Importance									
1	Capable of flight for extended period of time							9	1	Battery life	Minutes						
2	Capable of traveling an extended distance							9	2	Lift-to-drag ratio	Unitless						
3	Minimize flight path deviation							9	3	Motor/prop efficiency	Unitless						
4	Components are protected							9									
5	Complies with AMA safety code							9									
6	Capable of carrying UGV and water bottle							3									
7	Fast and cheap rebuild							3									
8	Looks decent							1									

Figure 1: Airframe subsystem requirements matrix. Note that sometimes ideal values are unrealistic; rather, they are ideal. E.g., the ideal required build time is not time at all. Realism will be incorporated into target values in a future version of the Requirements Matrix.