		Units	Minutes	Unitless	Unitless	Kilograms	Meters/second	Meters/second	Unitless	Unitless	Unitless	Unitless	Unitless	Unitless	Unitless	Unitless	Cubic centimeters	Hours	1-10 scale	1-10 scale
	Product: UAS Subsystem: Airframe	Performance Measures	Battery life	Lift-to-drag ratio	Motor/prop efficiency	Airframe weight	Average flight speed	Stall speed	Spiral stability eigenvalue	Static margin (with payload)	Cn,beta (yaw)	Cl,beta (roll)	Number of components that fall off the plane Unitless	Number of damaged components on landing Unitless	Number of AMA safety code violations	Lift coefficient	Storage volume	Time to rebuild	Focus group ease of repair	Focus group coolness rating
	Market Requirements	Importance	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	Tapana Timigita and Timina	9	_	•	•	•														
2		9	_	•	•	•	•													
_	Minimize flight path deviation	9	-					•	•	•	•	•								
_	Components are protected	9	-										•							
_	Complies with AMA safety code	9	-												•					
_	Capable of carrying UGV and water bottle	3	+	_	_	_	•	_								_	•			
8		1	-											_				_	_	
			40	5	0.2	0	10	N/A	-0.1	0	0.05	-0.15	0	0	0	0.35	0009	N/A	5	2
		ldeal	75	20	_	2	13	10	-0.05	1.0	0.1	-0.1	0	0	0	9.0	10000 6000	0	10	10
		Measured Predicted Target Upper Acceptable Ideal Lower Acceptable	N/A	N/A	N/A	10	30	20	0.4	0.15	0.15	0.1	0	0	0) .	12000	24	10	10
		Target	09	7.5	0.35	4.5	14	10	0	0.1	0.1	0	0	0	0	2.0	8000	10	8	8
		Predicted	09	7.5	0.405	4.5	14	11	0.3187	90.0	0.10452	0.06032	0	0	0	0.7	7974	10	8	8
		Measured	50	5	A/A	4.5	14.5	11	A/N	0.057	A/A	A/A	0	0	0	0.7	10766	8	9	