

Product: UAV Subsystem: PAYLOAD/Unmanned Ground Vehicle (UGV)  Notes: *normalized by the fuselage diameter cubed **normalized by chord		Subsystem Performance Measures	Units							
			kg	N						
		Drop mechanism mass								
		Weight mechanism can support								
		Aircraft internal volume consumed*								
		Mounting distance from aircraft CG**								
		Stowed drop mechanism drag								
		Maximum landing velocity								
		UGV landing distance from target								
		Rule violations								
Target Design Requirements		Importance	1	2	3	4	5	6	7	8
1	Complies with competition rules	5	●							●
2	Capable of lowering the payload to the ground	5	●	●						
3	Lands UGV within landing zone	3						●	●	
5	Delivers UGV without damage	3		●				●		●
6	Deployable from airframe	4			●	●	●			
7	Does not interfere with takeoff/landing	3	●			●	●			
8	Causes minimal aerodynamic interference	3				●	●			
9	Drop mechanism does not interfere with UGV movement	2						●	●	
		Upper Acceptable	Ideal	Lower Acceptable						
				0.6	0.1	0				
				-	1.3	0.6				
				100	0	-				
				100	0	-100				
				1.5	0.3	0				
				5	1	0				
22	0	-								
1	0	-								