

 Team: 517		Project: Green Propellant Thrust Stand														Date: 22-Nov-24											
Project Objective: Create a stand to test and measure the forces of a microthruster																											
Objective																Owner / Priority											
Academics	Testing	Presentation	Graduation	Major Tasks	Jan. 6th	Jan. 10th	Jan. 17th	Jan. 20th (MLK Day)	Jan. 24th	Jan. 31st	Feb. 7th	Feb. 14th	Feb. 21st	Feb. 28th	Mar. 7th	Mar. 10th - Mar. 14th (Spring Break)	Mar. 21st	Mar. 28th	Apr. 1st (SD Day)	Apr. 28th - May 2nd (Finals)	May 3rd (Graduation)	Aidan	Nicholas	Edward	Ryan	Jeffrey	
				Winter Break - Early Semester																							
	X			Finalize Calibration System	●																		X				
	X			Finalize Flame Bucket Setup	●																				X		
	X			Complete Modal Analysis		●																			X		
	X			Complete Thermal Analysis		●																				X	
X				Spring Semester Initial Meeting		●																	X	X	X	X	X
X				Setup Basic Error Propagation Code			●																	X	X	X	X
				Finalizing Design																							
	X			Determine Pipe Fitting Connections		●																		X	X	X	
	X			Edit CAD		●																	X				X
	X			Complete Final CAD			●																			X	
		X		Begin Drawings for Design Book			●																			X	
		X		Finalize Drawings for Design Book				●																	X		
				Rapid Prototyping																							
	X			Begin 3D Printing Components		●																					
	X			Construct Models/Reiteration			●																X	X	X		X
	X			Test and Validate Models			●	●																X	X		
				Final Prototype																							
	X			Order Materials			●																X				
	X			Begin Building				●																X	X	X	X
	X			Complete Build					●																X		
				Coding/Calibration																							
X				Sensor Testing		●		●																		X	
X				Error Analysis MATLAB Prototype			●																			X	
X				Signal Conditioning Testing		●			●																	X	
X				Calibration System Mockup			●			●																X	
X				Arduino Code v1				●																		X	
X				Arduino Code v2					●																	X	
X				Arduino Code v3							●															X	
X				Debugging									●	●			●	●								X	
				Testing																							
	X			Set Up Stand for Testing									●											X	X	X	X
	X			Run Water Test									●										X	X	X	X	X
	X			Evaluate Thrust Data																			X	X	X	X	X
	X			Trip to MSFC/Run Hot Fire Test																			X	X	X	X	X
	X			Evaluate Thrust Data																			X	X	X	X	X
				NASA Design Manual																							
		X		Add Material List			●																				X
		X		Format Build Steps							●	●											X			X	
		X		Format CAD Drawings														●					X	X	X		
				Presentations																							