

Customer Need	Primary Category	Secondary Category	Variable	High	Low	Desired
<b>PSAS</b>						
Formal Failure Modes and Effects Analysis (FMEA)	Document	Safety	FMEA	1	0	1
Deliverable Document: Safety S.O.P.	Document	Safety		1	0	1
Deliverable Document: Operations S.O.P.	Document	Document		1	0	1
Deliverable Document: Post Firing Analysis of Engine with suggestions for 8kN engine	Document	Analysis		1	0	1
Safety Procedures Known and Followed	Safety	Safety		1	0	1
Fuel: Isopropyl alcohol	System			1	0	1
Oxidizer: Liquid Oxygen	System			1	0	1
Pressurant: Nitrogen (gas)	System			1	0	1
Incorporation of PSAS Supplied DAQ (From TSAR)	System	Safety		1	0	1
Test Engine: 2.2kN engine supplied by PSAS	Hardware	System		1	0	1
Participation in any mandated safety Training (multiple customers)	Safety			1	0	1
Minimum human interaction with the test stand during operation	Safety	System		1	0	1
No Person(s) are to approach Test Stand while system is pressurized	Safety	System		1	0	1
Redundant system to prevent accidental pressurization of System	Safety	System		1	0	1
Funds available from PSAS should not exceed \$2,000 without prior approval	Budget		Money	2000	0	2000
Deliverable Document: Background, Research, & Theory of Operation	Document			1	0	1
Deliverable Document: Training Materials	Document			1	0	1
Deliverable Document: System Maintenance	Document			1	0	1
Deliverable Document: Test Site Management	Document			1	0	1
Deliverable Document: Transportation of Test Stand & propellants	Document			1	0	1
Deliverable files: Full Solidworks CAD model of Test Stand Assembly	Document			1	0	1
Software: All technical documents and files are to be regularly pushed to git	Document			1	0	1
Software: All other test stand administrative files to be stored on PSAS Shared google drive	Document			1	0	1
Deliverable Document: Bill of Materials	Document			1	0	1
Fully Constructed Test Stand (or whatever is left of it)	Hardware	System		1	0	1
Engine Chamber Pressure	System		Pressure	375	325	350
Fuel Mass Flow Rate	System		lbm/sec	unk	unk	1.16
Propellant Mass Flow Rate	System		lbm/sec	unk	unk	0.09
Injector spray angle	System		degree	unk	unk	45
<b>Capstone Advisor</b>						
Bi-Weekly meeting to discuss project and progress	Administrata					
<b>Capstone Class</b>						
<a href="#">Deliverable Document: Project Design Specifications</a>	Document					