Product Design Specification (PDS)			
Customer Need	**Primary Customer**	**Priority**	**Time**
Must be tested with liquid Nitrogen (LN2) and isopropyl alcohol (IPA)	PSAS	5	*****
Must safely keep the propellants separated at all times	PSAS	5	*****
Should have embedded sensors for data acquisition	PSAS	5	*****
Should have emergency shut off procedure and battery cutoff	PSAS	5	*****
Should have embedded sensors for feedback, and control	PSAS	4	***
Must deliver propellants at 450 PSI with NPSH of 45-100 PSI.	PSAS	4	***
Must be able to operate for multiple engine test fires (≥ 10 firings) without system overhaul	PSAS	3	****
Must handle launch module vibration and 10g's acceleration for 20 seconds.	PSAS	3	***
Must be compatible with liquid oxygen (LOX)	PSAS	3	*****
Should minimize system plumbing losses (major and minor)	PSAS	2	*
Must be able to be used on the PSAS engine test stand	PSAS	1	****