



Engine Technology Development Plan

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Version 1	2/19/2019	Initial Release



Engine Technology Development Plan

1.0 Overview:

The subsystem currently only exists as preliminary chemistry tests and ideation for engine design. The goals for Phase A are to do a safe, instrumented live-fire, and to accomplish all the L2 requirements for the full-scale engine on a smaller scale (i.e. relief valves, pressure testing, etc).

2.0 Technology Readiness Level Timeline:

TRL Level	Technology Status	Date in Program
1	Principles Observed	2/16/2019
2	Application Validated	4/2/2019
3	Proof-of-Concept Demonstrated	10/2/2019
4	Flight Hardware Demonstrated	4/2020
5	Flight Hardware Demonstrated in Simulated Environment	N/A
6	Demonstration in tandem with other subsystems	N/A
7	Flight Validated	5/2020

3.0 TRL Gateways:

TRL Level Achieved	Test to be Performed
1	Calorimetry Test
2	Static-small engine test
3	Static-full scale engine test
4	Combustion chamber pressure test
5	N/A
6	N/A
7	Mission flown