FULL SCALE PLASMA TESTING OF A SMALL ENTRY PROBE

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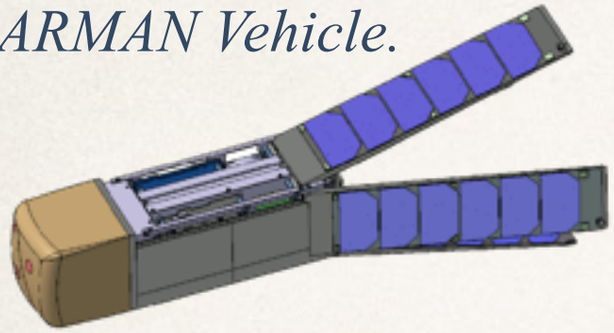
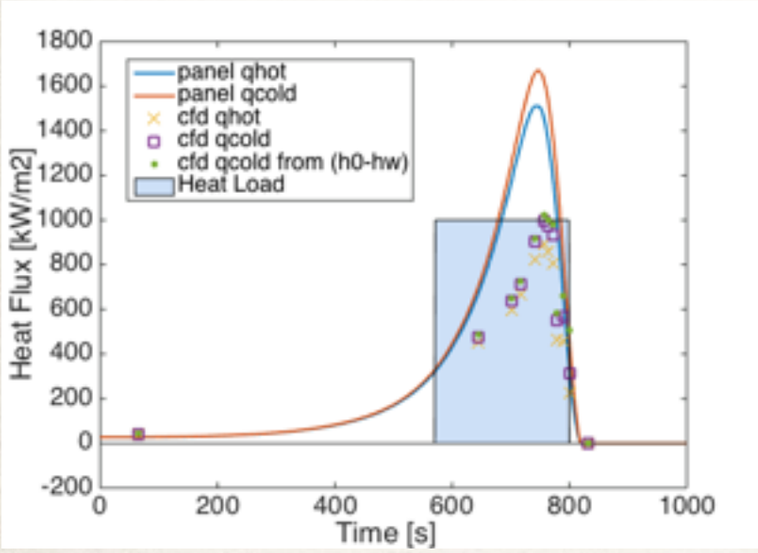
QARMAN Vehicle.



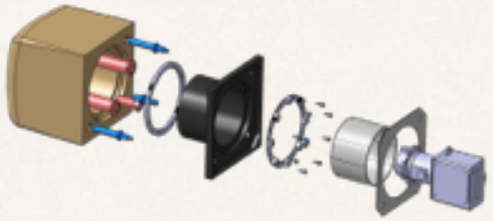
Aerothermodynamic In-Flight Experiments

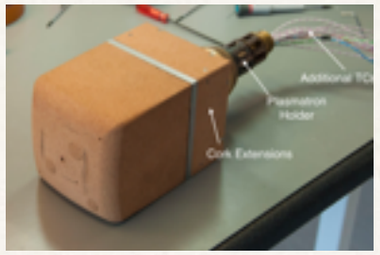
Payload	Objective	Parameter	Means
XPL01	TPS Efficiency	Temperature	Thermal Plugs
XPL02	TPS Pressure	Pressure	Absolute Pressure Sensor
XPL03	Vehicle Stability	Pressure	Absolute & Differential Pressure Sensors
XPL04	Laminar to Turbulence Transition	Pressure & Temperature	Thermocouples & Absolute & Differential Pressure Sensors
XPL05	Side Panel Heating	Temperature	Thermocouples
XPL06	Radiation	Species	Spectrometer
AeroSDS-SG	Aerodynamic Forces	Force	Strain Gauges
AeroSDS-TC	Heating of Panels	Temperature	Thermocouples

Entry Trajectory and Test Conditions

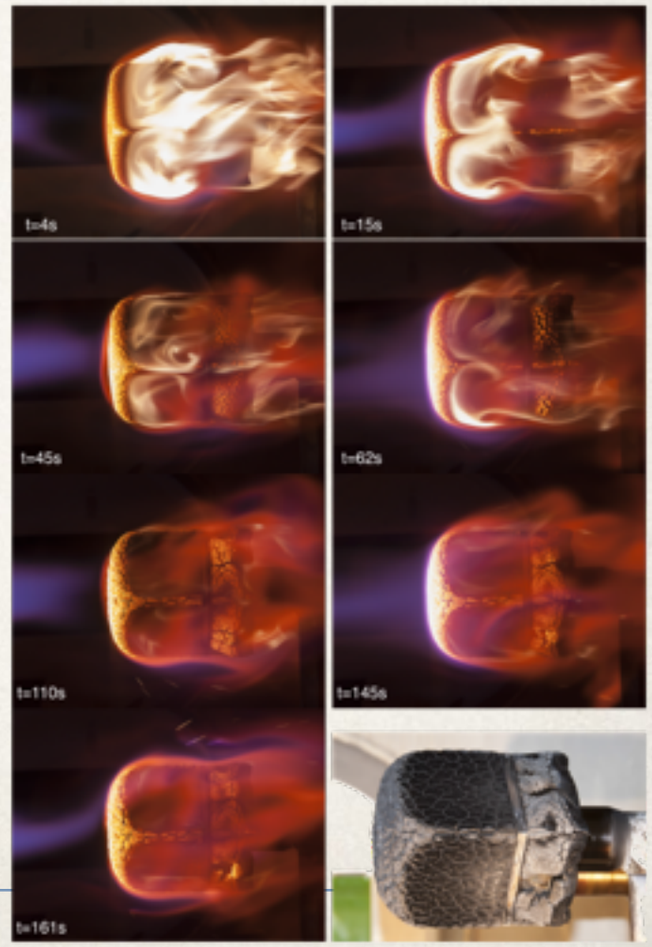


Test Object - Front Unit EM

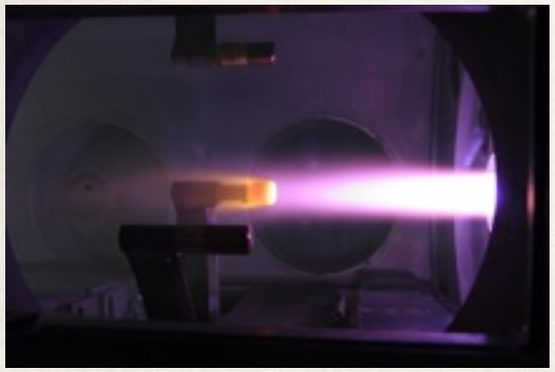


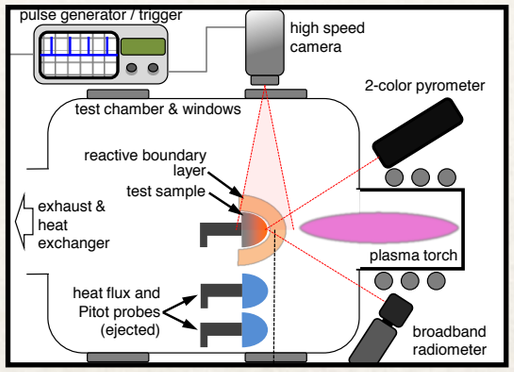


Plasma Exposure



VKI Plasmatron Setup





Successful Test!