



Development of Plasma Contactor



Objective

This effort will develop a plasma contactor which can emit electrons to space that are collected by a bare tether system. The system must use a very low flow rate of Xe gas, low power, be quick starting, be able to operate only on tether supplied current after starting, and have over 10,000 cycles.

Why Needed

The ProSEDS electrodynamic tether mission has serious constraints on power, weight and time. The above requirements have been met by a plasma contactor which can be used for current release as well as spacecraft potential and charging control.

Point of Contact

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Sponsor

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