Document Format

1. **The +Y/-Y Faces of any CubeSat structure shall have a length of 100 mm**

Description Here

1. **The payload shall be capable of determining relative distance between two spacecraft**

This requirement comes from the need to determine the relative distance between the two spacecraft as they separate for navigation purposes. The payload must be able to measure this distance. This requirement will be satisfied by demonstrating this capability prior to integration into the launch vehicle.

1. **CubeSat system shall be capable of recording relative displacement data**

This requirement comes from RCL-PLD-RVM1 as a way to store the data received. This will be satisfied by demonstrating this capability prior to integration into the launch vehicle.

1. **Low friction, 2D testing of the CubeSat system release mechanism shall be conducted**

This requirement comes from the need of the spacecraft to separate to conduct its mission. This can be verified by the constructed FRED system. (Frictionally Reduced Environment Dynamics)

1. **Pressure Vessels shall have a factor of safely no less than 4**

This requirement comes from the document of CubeSat design specification Rev12 2.1.4.1. This can be verified by calculations of the pressure of the pressure vessel.

1. **Low friction, 2D dynamic thrust testing shall be conducted on the propulsion system**

This requirement comes from the need of the spacecraft to use propulsion to complete its mission. This can be verified by the constructed FRED system. (Frictionally Reduced Environment Dynamics)

1. **CubeSat system shall not broadcast in RF until ejection +45 minutes**

This requirement comes from the launch service provider document. This can be verified by the day in the life test performed before integration.

1. **CubeSat system shall not release deployables until ejection +45 minutes**

This requirement comes from the launch service provider document. This can be verified by the day in the life test performed before integration.