

SNC[®]



SNC Dream Chaser Rideshare Capabilities

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Dream Chaser CRS2 Missions

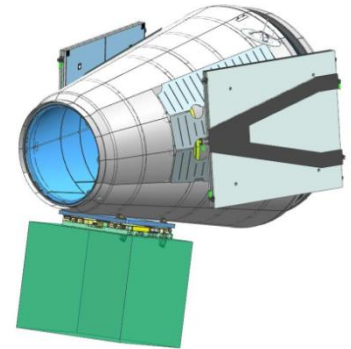
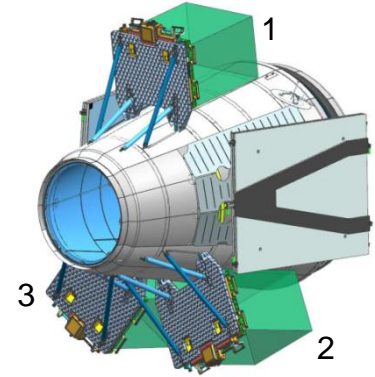
- NASA has contracted with SNC a minimum of 6 cargo resupply mission to the ISS on Dream Chaser
- Dream Chaser carries both internal pressurized and external unpressurized Payloads
- For a given missions, NASA could choose to not manifest some of the external payload slots
 - SNC would then be able to sell those locations commercially
- SNC will have the first indication of an available slot L-18 months



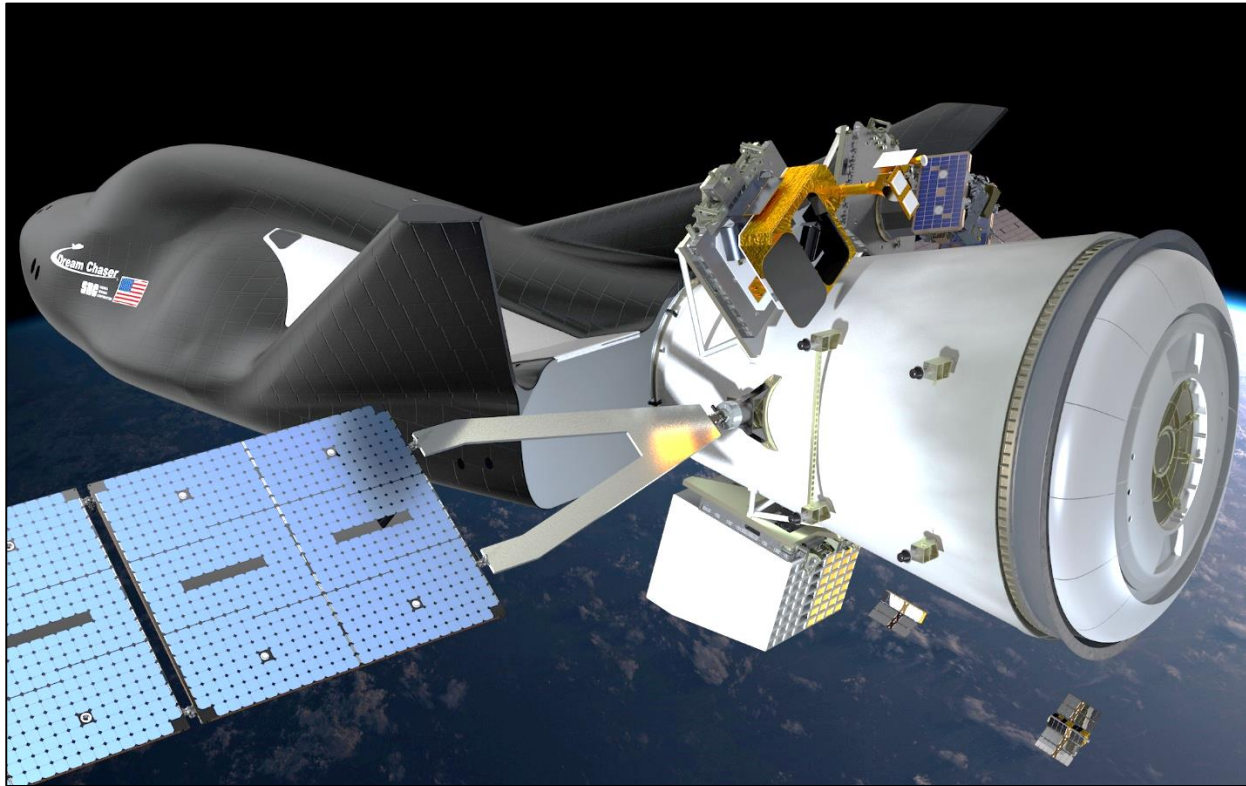
- Satellites can be deployed before arrival to ISS or after departure
 - If after departure, the satellite(s) would need to meet NASA safety requirements
- Target orbit parameters:
 - Inclination = 51.6
 - Altitude = 100km – ISS altitude
 - Opportunities to deploy above ISS can be explored with NASA

Cargo Module Accommodations

- The Cargo Module was originally designed to accommodate different cargo configurations to the ISS for unpressurized cargo
 - Can accommodate standard FRAM of JEM-EF payloads
 - Same mounting locations can be used for small satellites and deployment mechanisms
- The Cargo Module accommodates 2 configurations
 - 3 payload locations:
 - Payloads up to 500kg in each location
 - Standard services are 120V power, Ethernet, and video
 - 1 payload location:
 - Up to 1500kg
 - Standard services are 120V power, Ethernet, and video
- The payload can interface with the Cargo Module through the FRAM/JEM-EF interfaces or develop it's own way to mount directly.



Small Satellite Deployment Concepts



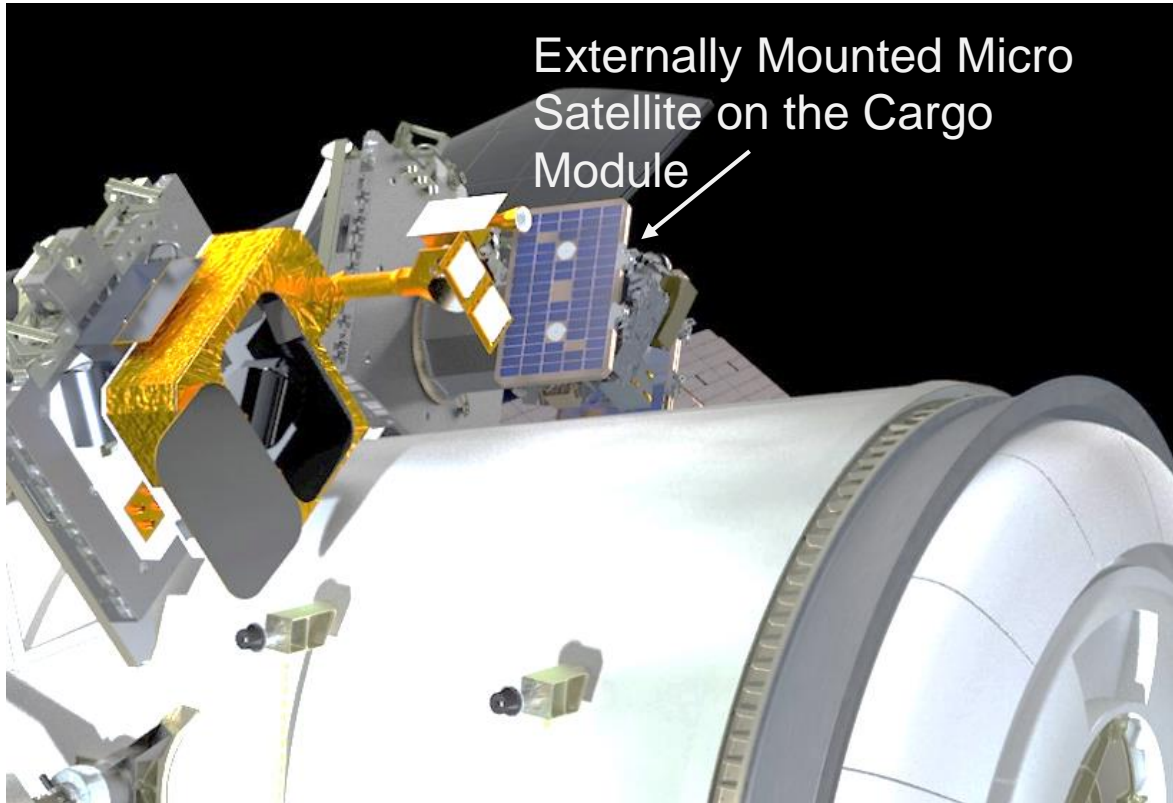
- Externally Mounted on the Cargo Module
 - SNC can provide the separation interface
- or-
- The satellite provider can provide the separation interface and mount to the direct mounting locations on the Cargo Module

External Payload Deployment – CubeSats



- Externally Mounted deployer
- Deployed in LEO
- Possible data recording and downlinked

External Payload Deployment – Micro Satellite



- Externally Mounted Micro Satellite
- Satellite deployed in LEO
- Possible data recording and downlinked

Thank you

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