KABER
NANORACKS ISS MICROGSATELLITE DEPLOYMENT SYSTEM

NRSS
NanoRacks Separation System
Alternative to Lightband Separation System
Fabricated specific to mission requirements
First use of ISS MMS (SPDM) by NanoRacks
NANORACKS DEVELOPED KABER in order to meet growing customer demand for deploying microsatellites in low-Earth orbit.

MISSION-1 LAUNCHED ON ORBITAL-ATK CRS-4 (OA-4)

MISSION-2 SCHEDULED TO LAUNCH ON ORBITAL-ATK CRS-7 (OA-7)

Launched via pressurized launch vehicle to the International Space Station

Payload envelope easily accommodates 24U form factor

Satellites certified for ISS safety separately

Fully assembled Kaber is mounted & deployed outside of the ISS via the JEM Airlock Slide Table

NRSS "fly-away" portion, remains attached to satellite (8" diameter bolt hole pattern model shown). Designed and built by NanoRacks.

NRSS vestigial "stay behind" portion, remains attached to Kaber (standard outer flange diameter for all models)
ON SITE at customer or NanoRacks Facility, microsat flight integration to NRSS

BUBBLE WRAP and hard foam packaging

CREW TRANSFER BAG (CTB)

SOFT STOWAGE processing for ISS visiting vehicles
**NANORACKS ISS ON-ORBIT OPERATIONS**

**INSTALL JCAP** to JEM A/L slide table

**MATE** Kaber to JCAP

**MATE** Microsat and NRSS combo to Kaber

**JEM A/L** depressurization operations. Microsat-Kaber combo EVA extension for ISS SPDM robotic arm grapple.

**ISS SPDM** robotic arm grapples Kaber

**ISS SPDM** robotic arm manuever to deploy