



# MISSION ROBOTIC VEHICLE (MRV)

## Next-generation Robotically-Enabled Servicing Vehicle

The MRV is SpaceLogistics' next-generation on-orbit servicing vehicle to meet the support and maintenance needs of satellites in GEO orbit. The MRV leverages the heritage Rendezvous Proximity Operations and Docking (RPOD) system of its highly-acclaimed predecessor, the Mission Extension Vehicle (MEV), but incorporates a robotic module in place of the MEV's docking system.

While the MRV's primary function will be the installation of Mission Extension Pods (MEPs) or other augmentation payloads on current operational satellites, its sophisticated robotics expands the benefits the MEV currently offers to include:

- Detailed robotic inspection
- Augmentation
- Relocation
- Repair
- Refueling
- Docking with non-standard client spacecraft interfaces

### Features:

- Two 3m, 7 DOF robotic arms
- 20+ Situational awareness cameras for safe robotic operations
- Single fault-tolerant MEV bus design
- Refuelable chemical propulsion system for RPOD
- Electric propulsion for orbital maneuvering

## About SpaceLogistics

SpaceLogistics, a Northrop Grumman company, is the global leader in the development and deployment of on-orbit satellite servicing systems and the first and only company performing on-orbit servicing for commercial GEO satellites. Our planned series of servicing vehicles will provide support and maintenances of satellites in GEO orbit by sustaining maneuverability, extending service life, providing enhanced capabilities and enabling future missions for a variety of customers.

*Pioneering the Future of Space*

## Business Contact

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