GeoComm Life Extension
Using the ViviSat Mission Extension Vehicle (MEV)
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ViviSat is an in-orbit satellite life extension service providing a game-changing leap in:

- Operating flexibility,
- Risk mitigation possibilities,
- Financial flexibility, and
- Business model options
Spacecraft Servicing Market Is Significant

Of 128 evaluated,
30% were repair candidates
37% were life extension candidates
Mission Extension Vehicle

- Reusable “jet-pack” propulsion and attitude control system
  - Performs all station keeping maneuvers for the host (inclination, longitude, eccentricity)
  - Performs attitude control for the host using reaction wheels and star trackers

- Docks to the aft end of a host and stays there until service no longer needed.
  - Simple mechanical interface only
  - No power or data interfaces with the host

- Delivered as a lease service to the host satellite

- Extends useful life of GEO satellites

- Pointing agility provides new utilization possibilities for communications payloads
Improve GEO Comsat Fleet Management to:

- Extended satellite life on orbit
- Re-purpose satellites for new slot development
- Re-purpose satellites for on orbit back up of
  - Anomalies
  - Launch failures
  - Procurement delays
- Rescue satellites stranded in incorrect orbits
- De-orbit satellites to graveyard at end of life
- Provide more flexibility in capital deployment and asset replacement

Improve financial performance from existing assets
Our services will be offered in a Responsible, Transparent, and Cooperative manner subject to U.S. government policy, laws and contractual proprietary requirements.

Responsible

• Follow same COPUOS rules as other satellite operators including but not limited to:
  □ Minimize the potential of debris generation
  □ Prevent uncoordinated near approaches to other known resident space objects
  □ Coordinate RF transmissions with neighboring operators

• Utilize experienced personnel & organizations for manufacturing, integration, testing, and operations

• Perform extensive in-orbit checkout of systems and procedures in a safe orbit

Transparency

• We will work with regulators to insure they understand our plans and activities in cooperation with our customers

Cooperative

• Mission Extension Vehicles are procured and launched on a manifested basis with dedicated anchor customer contracts

• All services performed under commercially contracted arrangements