



Ground Based Midcourse Defense

Space Vector has been supporting Ground based Midcourse Defense (GMD) testing since its inception over 20 years ago. Beginning in the early 1980's with the Homing Overlay Experiment (HOE) through completion of the current Payload Launch Vehicle (PLV) program, Space Vector, as the principle contractor to Lockheed Martin, has delivered a total of 20 sets of flight hardware. Space Vector developed, fabricated and tested the major launch vehicle sections that includes:



- Clamshell Nose Fairings
- Kill Vehicle Mounting Rings
- Payload Support Modules
- Booster Adapters
- Interstages
- Aft Skirts

The two-stage (SR19/M57) Payload Launch Vehicle has just completed flight testing of critical interceptor system components in a series of 10 launches from the Kwajalein Missile Range (KMR) located in the Marshall Islands.



Vehicle Interface Unit



*Nose Fairing Deployment Test
at Space Vector*



Reaction Control System



Ground Based Midcourse Defense

Key PLV hardware provided by Space Vector

Clamshell Nose Fairing

- Spring Deployment System
- Separation Ordnance
- Insulated Skin/Ring Structure
- Hinge Pusher Assemblies

Booster Adapter

- Reaction Control System
- Vehicle Interface Unit (VIU)
- NiCd Battery Packs
- NCU Junction Box
- Skin/Ring Structure with Cork Insulation
- Honeycomb Equipment Plates
- Multi-Branch Cable Harnesses

Payload Support Module (PSM)

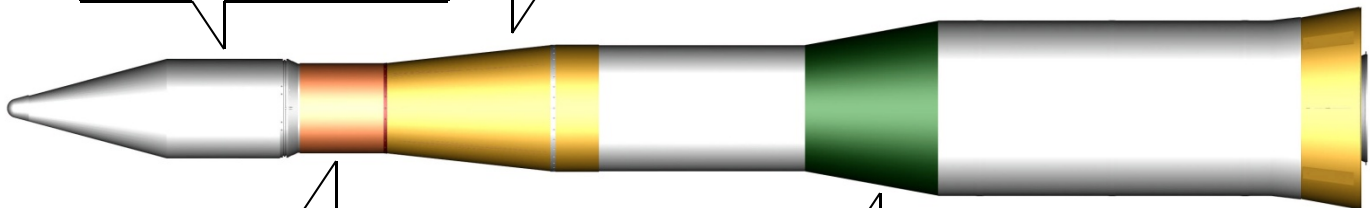
- KV Mounting Ring
- Payload Access Panels

Modified MM Interstage

- Connector Separation Assembly
- Internal Ablative Coating

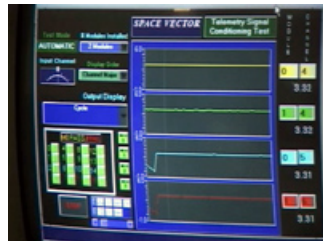
Aft Skirt

- Skirt Structure
- Internal Ablative Coating



Space Vector Developed Support Equipment:

- Booster Erector
- Module Lifting Slings
- Vehicle Emplacement Ring
- Umbilical Cables
- VIU and Booster Adapter Test Stations
- Load Test Fixture
- Handling Carts
- Vibration Plates
- Booster Simulators for M55, M56, M57 and SR19



Testing of the Booster Adapter



Umbilical Cable