

## Maritime Beam Control Technology









# Technology ChallengesTracking maritime targets in high clutter ocean

- Tracking maritime targets in high clutter ocean environment : solar glint, high sea states, white caps, intermittent contact
- Fine pointing laser beam in high dynamic maritime environment with atmospheric turbulence
- Aimpoint maintenance on high-maneuvering target
- Atmospheric turbulence compensation in maritime environment
- Operation in maritime environment

### Navy DE Program

• Leveraging Current Efforts in Beam Control Technology



- High Energy Laser, Low Aspect Target Tracking (HEL-LATT) Demo at White Sands
  - Acquisition, tracking and aimpoint selection / maintenance AIM-9X Tracker
- Maritime Testbed
  - APT Function
  - ATM Turbulance Compensation
  - Maritime Imaging
  - High Velocity Target Tracking

### **Test & Evaluation**

- D&I
  - Incoherent Beam Combining Demo in FY09
  - Land Based Demo in FY10
  - Maritime Demo in FY12
- INP Phase 1
  - Fab and Test, Demo in Lab in FY14
  - Demo at Maritime Site in FY14
  - Barge Integration and Demo in FY15