Precision Strike –
Industry Perspective

“Closer than you think”

Bob Van Allen
Program Director
HEL and EO Systems
The Promise

Missile Defense Systems

• **HEL Attributes**
  - Speed of light engagement
  - High precision offers low collateral damage
  - Graduated damage effects
  - Concurrent sensing capabilities
  - Deep magazine potential
  - Standoff range

• **Challenges**
  - Field of regard limited to Line of Sight
  - Atmospheric losses over long propagation lengths
  - Availability subject to weather: Clouds and obscurants limit field of engagement
HEL Programs Are In Integration and Field Test

- Airborne Laser (ABL)
- Advanced Tactical Laser (ATL)
- HEL Relay Systems ("redirected energy")
HEL Technology is Maturing

Tactical Relays
*Surgical Strike Capability in the Urban Environment*

Combining Pinpoint, Laser Accuracy, Agility, and Network Centric Operations

Relay Systems

ARMs
AEROSPACE RELAY MIRROR SYSTEM
PERFORMANCE ENHANCEMENT FOR FUTURE HEL SYSTEMS
Hurdles

- System/technology readiness
- Military utility and effects
- Development/ life cycle cost
- Development Funding
- Policy