

Air Armament Center



Flexibility Precision Weapons Bring to the Fight



Dr Bruce Simpson, SES Director 308 ARSW 11 Mar 2009



308 ARSW Mission/Vision

Mission Statement

Equip Our Warfighters with Air Dominance, Strike, and Combat Support Capabilities to Fight and Win Decisively





Vision Statement

War Winning Capabilities...On Time, On Cost











2





Capabilities Evolving and Integrating into the Battlespace



Networked Weapons and Platforms

Capabilities

- Precision
- Moving targets
- Low collateral damage

Integration Capabilities

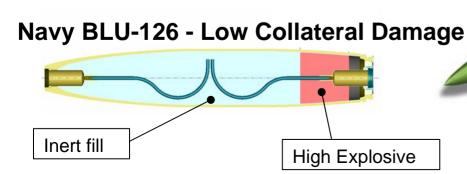
- Find/fix/target
- Decoy
- Suppress/deny



Joint Direct Attack Munition (JDAM)

- Low cost, guidance tail kits
- GPS, Inertial Navigation System
- Mk 80 Series/BLU-109 compatibility
- Accurate <5 meters, in-flight retargeting
- Autonomous & adverse weather capability
- F-15E, F-16, F/A-18, F-22A, AV-8B, B-1B, B-2 B-52H



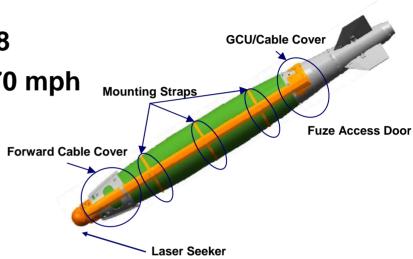




Laser JDAM

- Response to Urgent Operational Need
- Precision Laser Guidance Kit on GBU-38
- Ability to engage moving targets up to 70 mph
- Accuracy: 3m Stationary, 6m at 70 mph
- Field installable
- Mk-82, BLU-111, BLU-126 compatibility
- F-15E, F-16 Block 40/50, F/A-18A+/C/D
- Production: 400 Air Force, 400 Navy



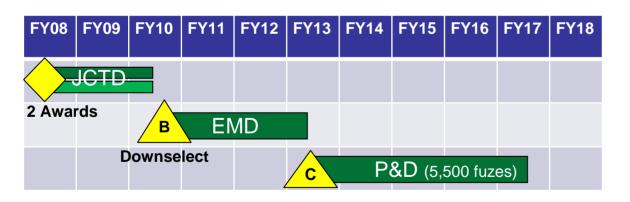


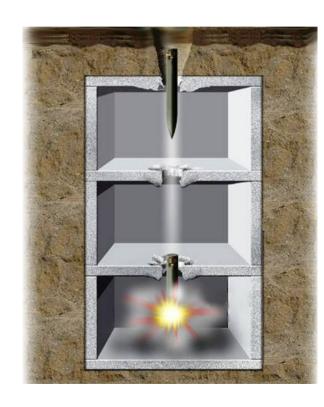




Hard Target Void Sensing Fuze

- Capable of defeating hardened and deeply buried targets
- Capable of sensing multiple voids
- Capable of operating in hardened concrete
- Reprogrammable from aircraft cockpit







Small Diameter Bomb (SDB I)

- All-weather, autonomous, precision
- 250 lb class GPS/INS weapon
- Reduced collateral damage
- Flexible attacks with standoff ranges >50nm
- Increased loadout--multiple strikes per sortie
- Cockpit-selectable electronic fuze
- F-15E can receive or self generate coordinates





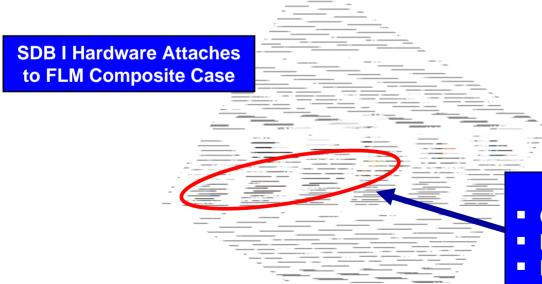






SDB Focused Lethality Munition (FLM)

- FY06 Out-of-Cycle JCTD
- CENTAF urgent need
- Low collateral damage variant of SDB
- Precisely delivers lethal blast
- Soft targets at risk w/ reduced collateral damage







New Technology

- Composite Case Warhead
- Multi-Phase Blast Explosive
- Blast Only



Directed Energy

- Speed of light weapon
- Scalable effects
- Reduced collateral damage



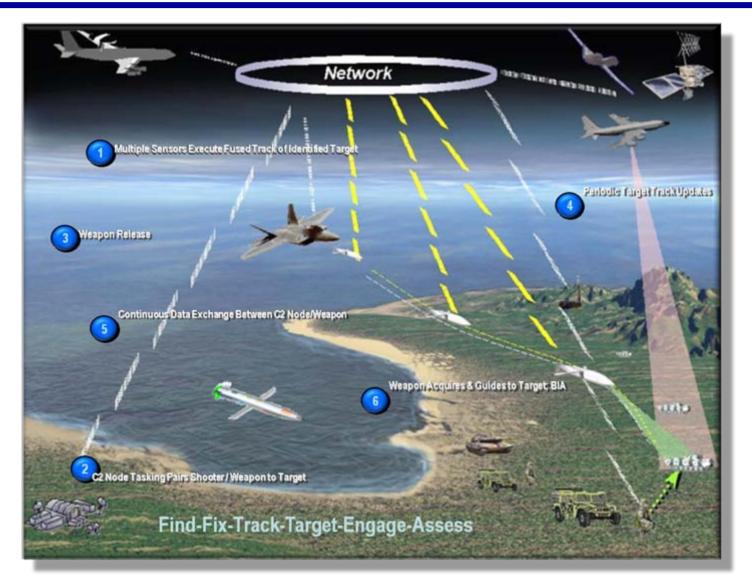


Advanced Tactical Laser





Integration Capabilities





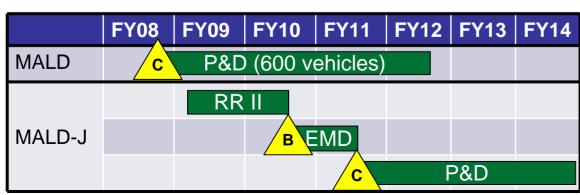
Miniature Air Launched Decoy (MALD) MALD Jammer (MALD-J)

MALD

- Small, low-cost, air-launched, expendable decoy
- Stimulates integrated air defenses
- Emulates fighter/attack/bomber
- Increases enemy's "Fog of War"

MALD-J

- Adds jammer and retains decoy capability
- Degrades EW/GCI/ACQ radar tracks





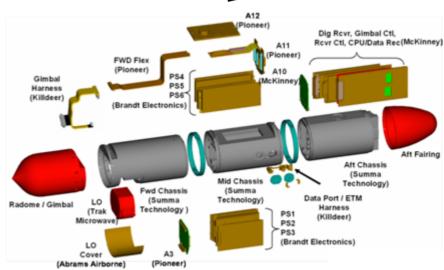
UNCLASSIFIED



HARM Targeting System (HTS)

- Single Ship HARM Targeting
- Multi-ship PGM Targeting
- Time Critical Targeting
 - Targeting mobile SAMs
 - Protecting strike packages
- Increased Detection Range







Controller

3rd Partv

Weapons

Network Enabled Weapons

4 Periodic
Target

Weapon Acquires

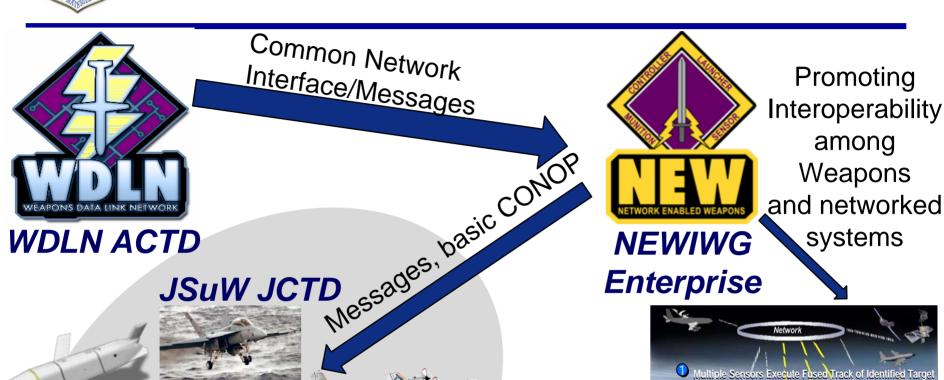
Target: BIA

C2 Node Tasking Pairs Shooter / Weapon to Target

Find-Fix-Track-Target-Engage-Assess

3 Weapon Release

5 Continuous Data Exchange Between C2 Node/Weapon



UNCLASSIFIED

Goal: Any Targeting Asset, Any Weapon

Kill chain complete

3rd party targeting

for Weapons, JTTPs



Joint Air to Surface Stand-off Missile (JASSM)

- Stealthy cruise missile
- Precision guided vs. high value targets
- Autonomous Launch and Leave >200nm
- Survivable in advanced threat environment
- Guidance: Inertial Navigation / GPS
- F-16C/D, B-1B, B-2A, B-52H







JASSM Extended Range (JASSM ER) JASSM Anti-Surface Warfare (JASSM ASuW)

ASSM ER

xtends range to > 500 nm

ASSM ASuW

bility to engage moving ships

ommunicates with ISTARS

FY09 FY10 FY11 FY12 FY13 FY14

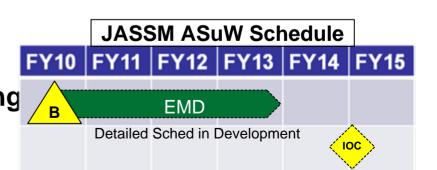
EMD tracking

P&D



AGM-158B







Small Diameter Bomb II (SDB II)

- Capable against moving targets
- Compact, all weather, standoff weapon
- INS/GPS guided, precision weapon
- Multi-mode seeker

