

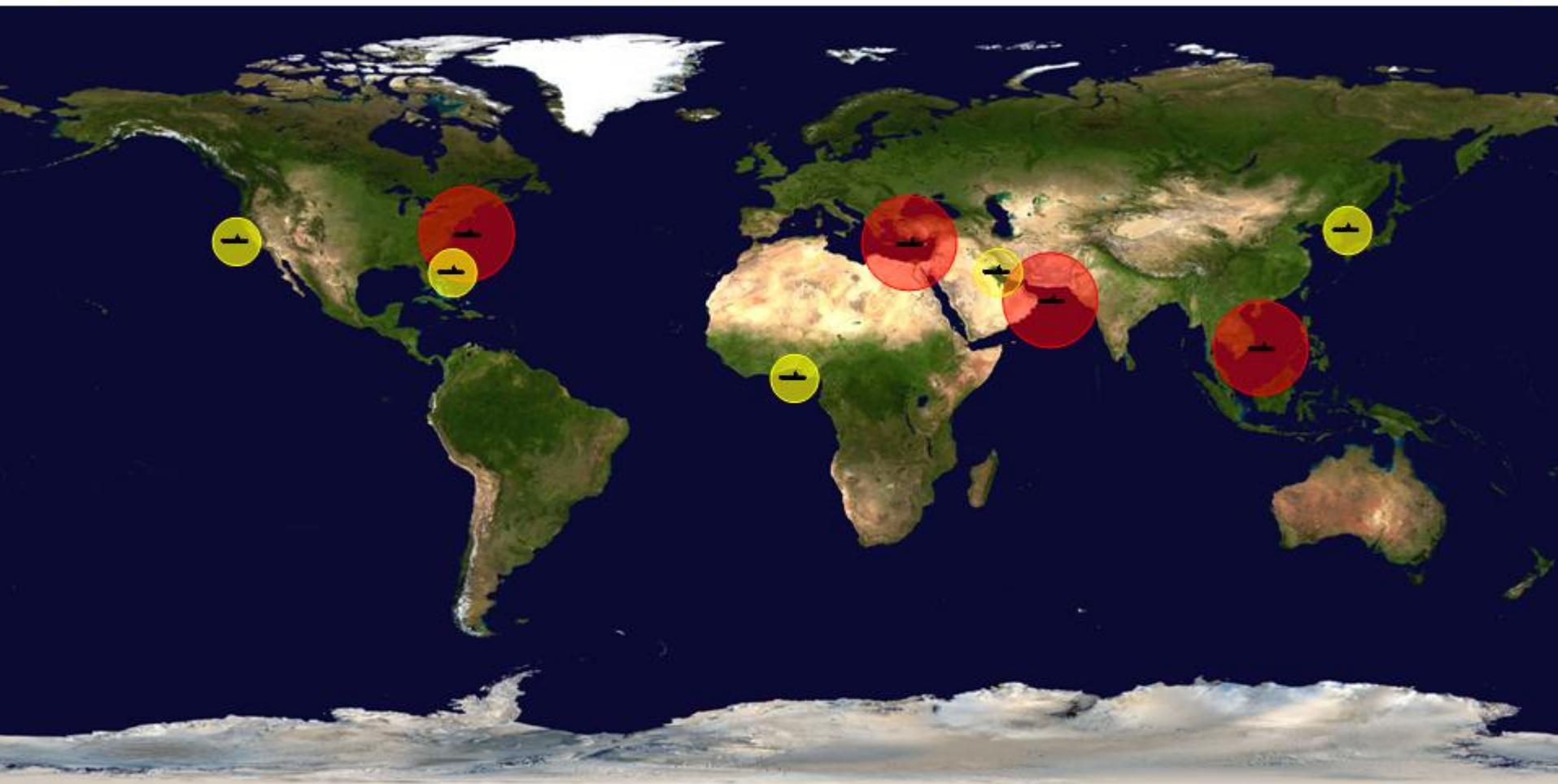


Net Enabled Weapons
PRESENTATION TO:
Precision Strike Technology Symposium

PRESENTED BY:
CAPT Mat Winter
Program Manager, Precision Strike Weapons
24 October 2007
mathias.winter@navy.mil



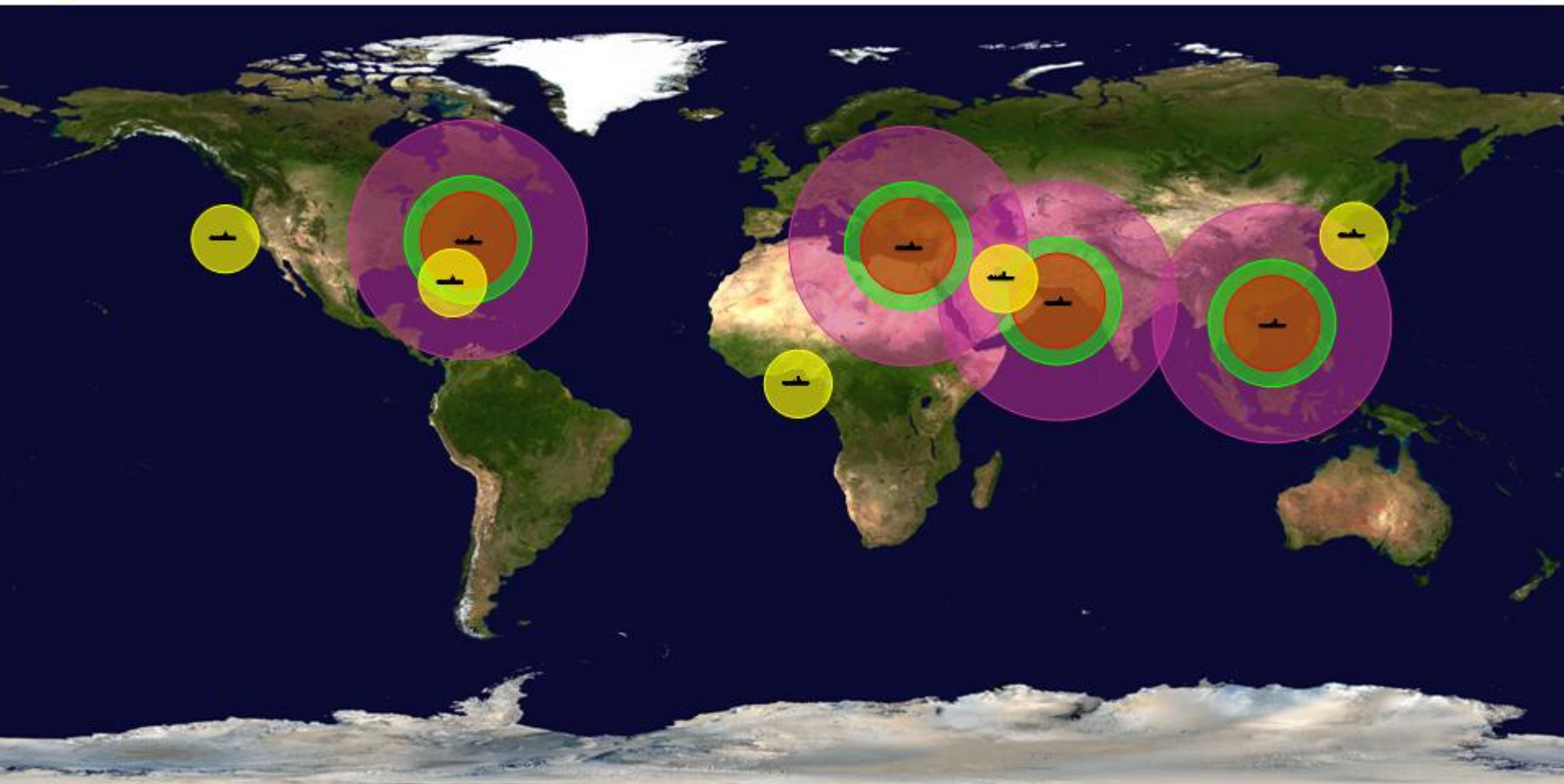
Reach of Naval Aviation Today



**CARRIERS AND THEIR AIR WINGS,
DELIVERING TOTAL WARFIGHTING CAPABILITY TODAY**



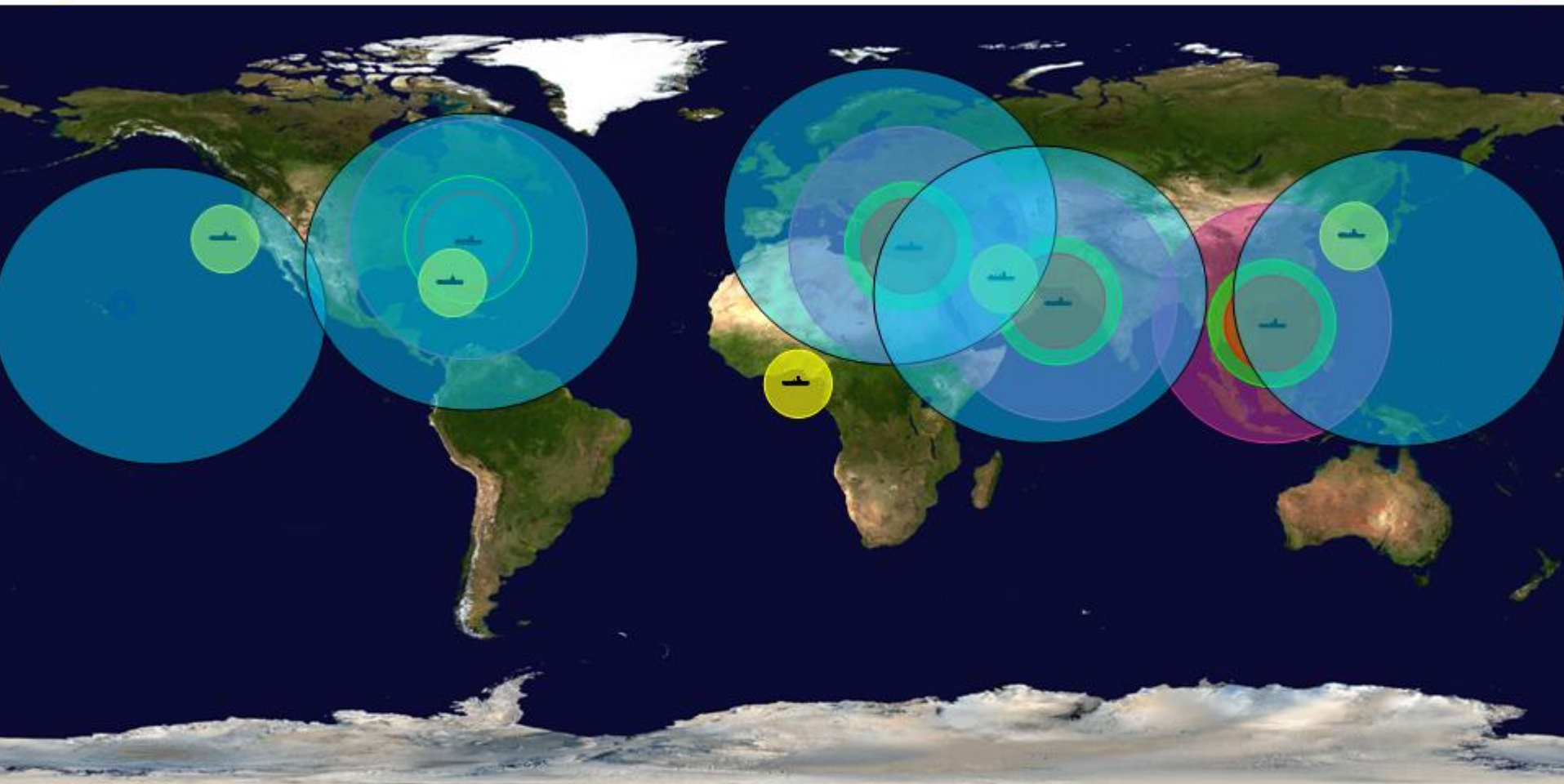
Reach of Naval Aviation Tomorrow



**TRANSFORMATIONAL WEAPON SYSTEMS PROVIDE
UNPARALLELED RANGE AND STRIKING POWER**



Reach of Naval Aviation Future Vision



**UNMANNED AVIATION SYSTEMS PROVIDE
ADDITIONAL STRIKING POWER**



Strike Weapons Today and Tomorrow



Today	Tomorrow
Direct Attack	
Laser Guided Bomb (LGB)	Dual Mode LGB
Joint Direct Attack Munition (JDAM)	Laser JDAM
BLU-126/B LCDB	BLU-126/B LCDB
LGB DMLGB JDAM Maverick	Direct Attack Moving Target Capability (Retrofit GBU-12 and GBU-38)
Medium Range Standoff	
Harpoon	Harpoon Block III
JSOW-C	JSOW-C1
	SDB-II
Long Range Standoff	
SLAM-ER	SLAM-ER



JDAM Family of Weapons

Today



Laser Guided Bomb



GBU-31(V)2/B



GBU-32/B



GBU-38/B

Low Collateral Damage Bomb (BLU-126/B)

PBXN-109



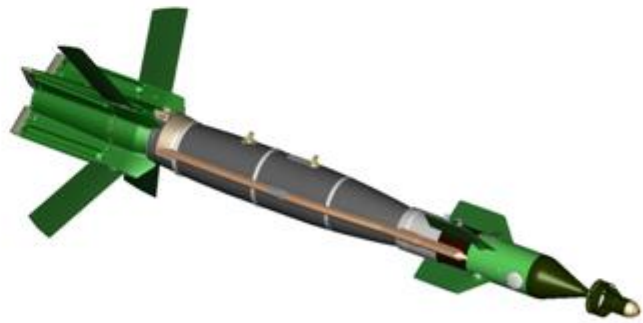
Inert

Felt Pad/Air Gap

Tomorrow

Dual Mode Laser Guided Bomb GBU-12F/B)

Direct Attack Moving Target Capability

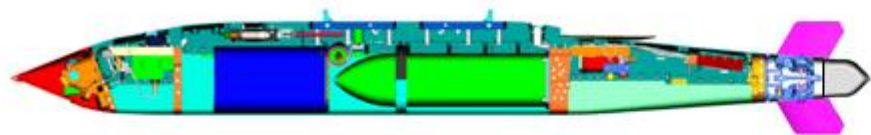


Laser JDAM GBU-54)





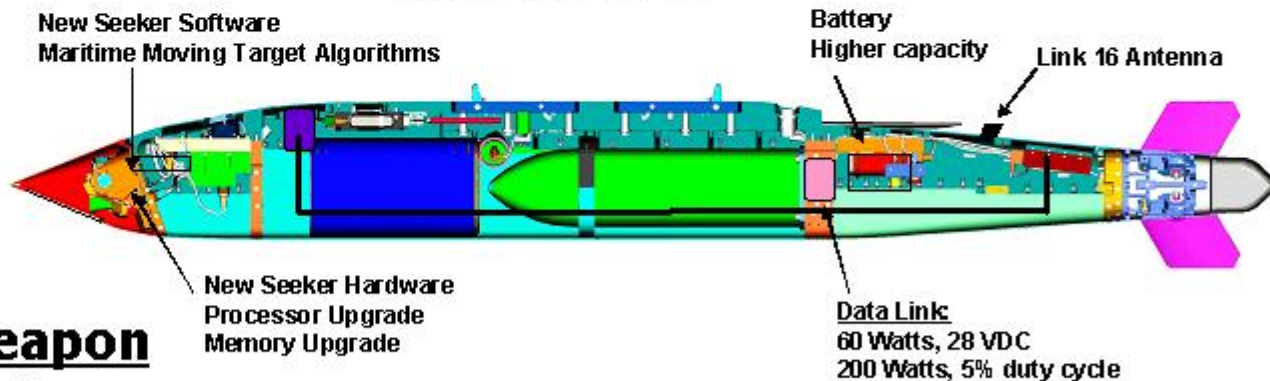
Today



Joint Standoff Weapon AGM-154C

Tomorrow

AGM-154C-1

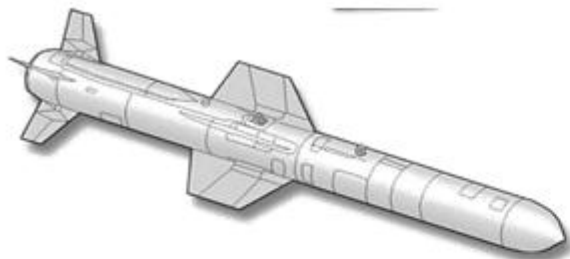


Network Enabled Weapon

- Link 16 Datalink communication
- In Flight Target Updates
- Moving Maritime Targets



Today



Harpoon



Tomorrow



Harpoon Block III

Network Enabled Weapon

- Link 16 Datalink communication
- In Flight Target Updates
- Moving Maritime Targets





Today



Standoff Land Attack Missile – Expanded Response



Tomorrow

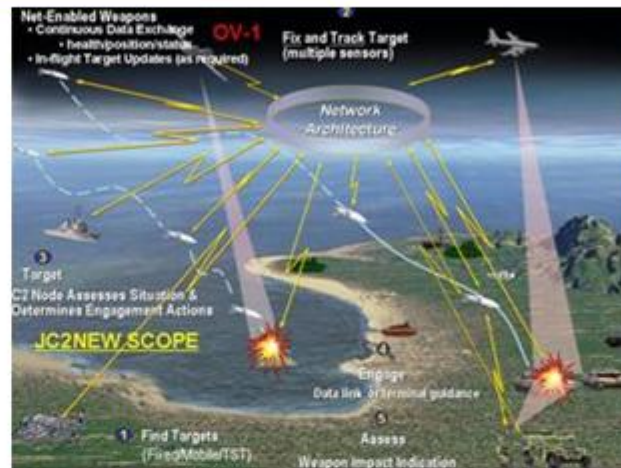




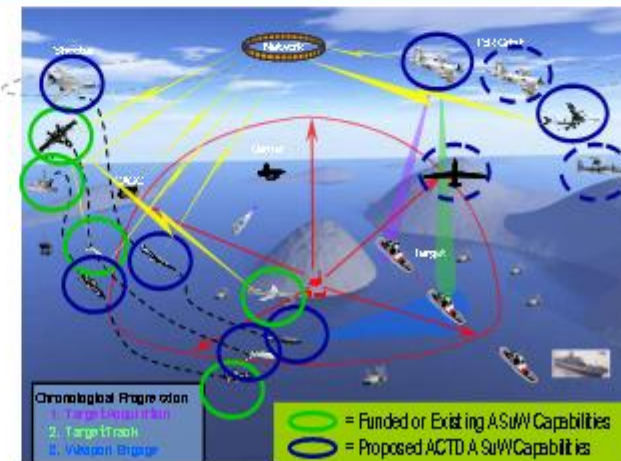
Net-Enabled Weapons Initiatives and Transition Paths



WDLN ACTD



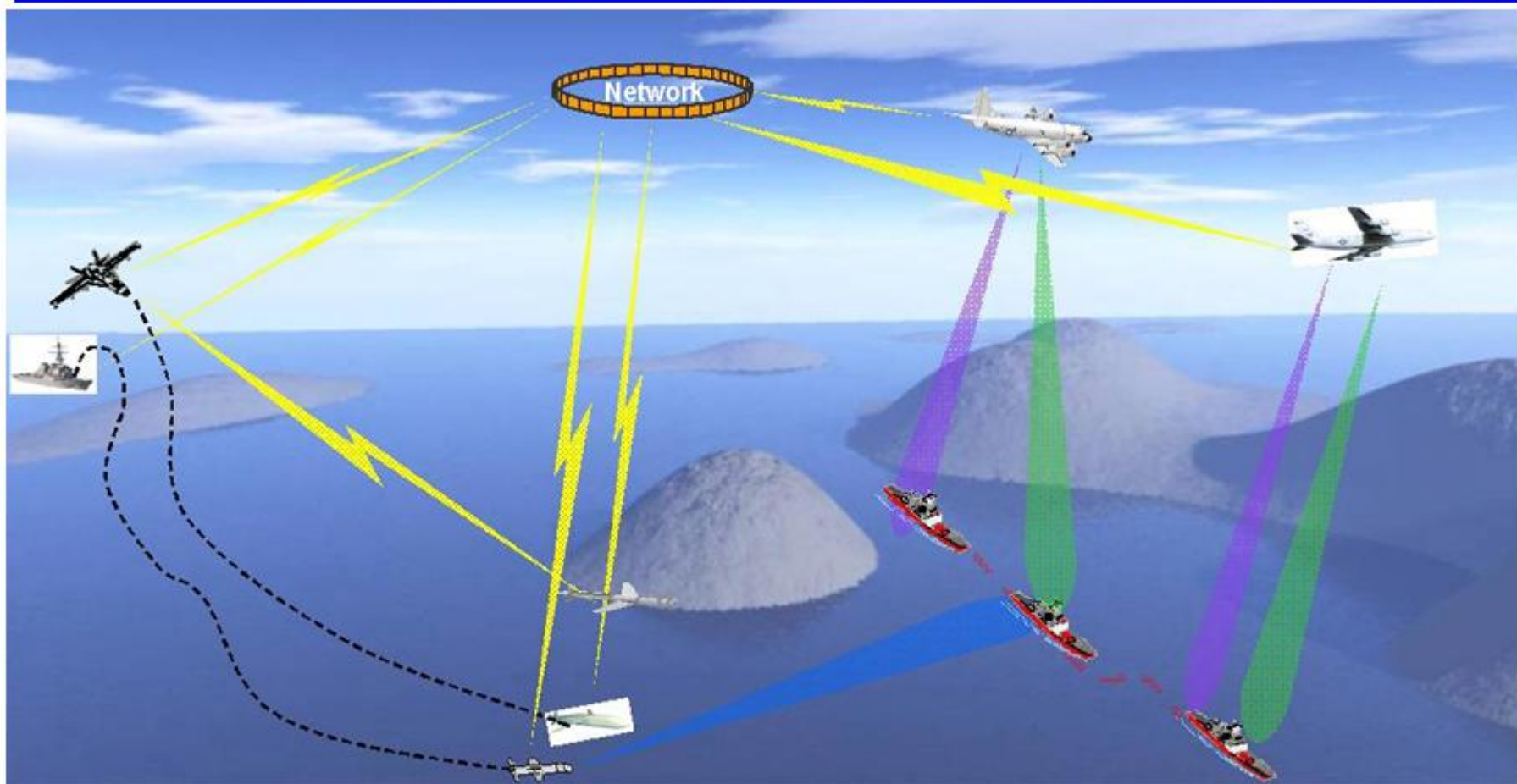
JC2NEW JT&E



JSuW JCTD



Joint Surface Warfare (JSuW) Joint Capability Technology Demonstration (FY 2007-2010)



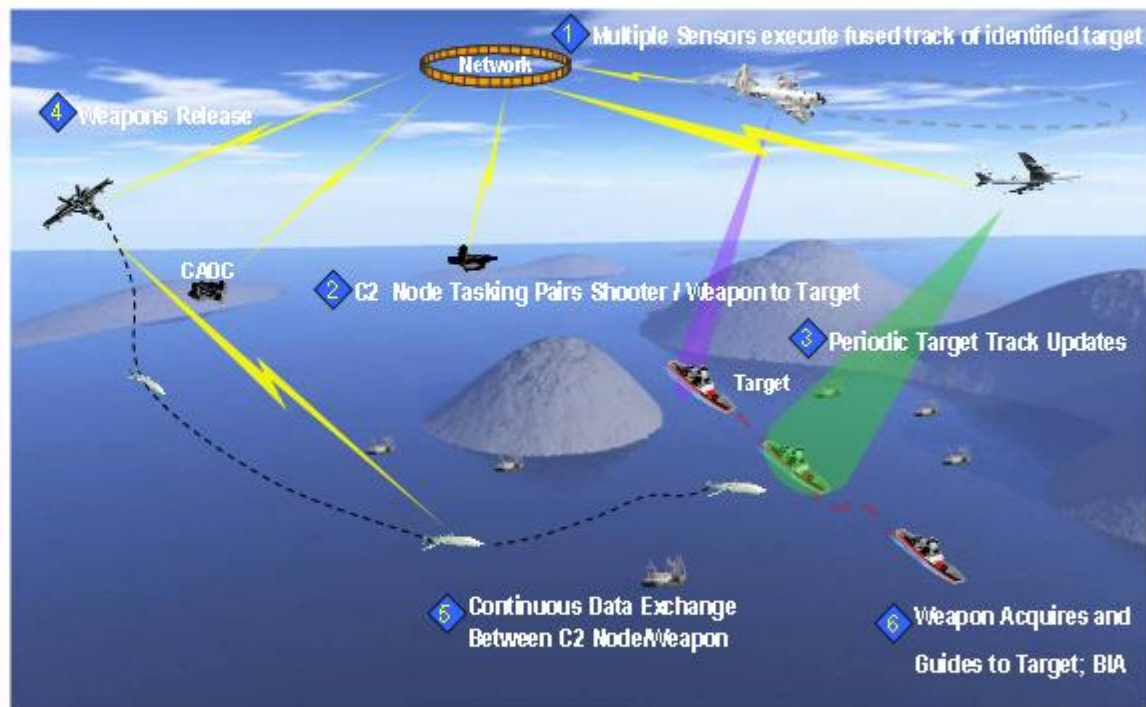
- JSTARS / LSRS targeting (3rd party targeting source with shooter retaining admin control)
- FA-18 shooter / Surface Harpoon shooter simulated
- JSOW-C-1 / Harpoon III / SLAM-ER (IFTUs through FA-18 / AWW-13 pod to weapon)



Net Enabled Weapons (NEW) Message Set



- FY05 Weapon Data Link Network Advanced Capability Technology Demonstration
- Resulted in MIL-STD-6016C Interface Change Proposal
- J-11 series NEW messages
 - Latitude, longitude
 - TLE size
 - TLE ellipsoid orientation
 - Time stamp of target detection
 - Elevations
 - Track quality
 - Velocity
 - GPS time
 - Track Number
 - Retarget
 - Abort
 - In-flight tracking
- NEW Link 16 network
 - Design appropriate network to support the mission





JSuW JCTD Summary



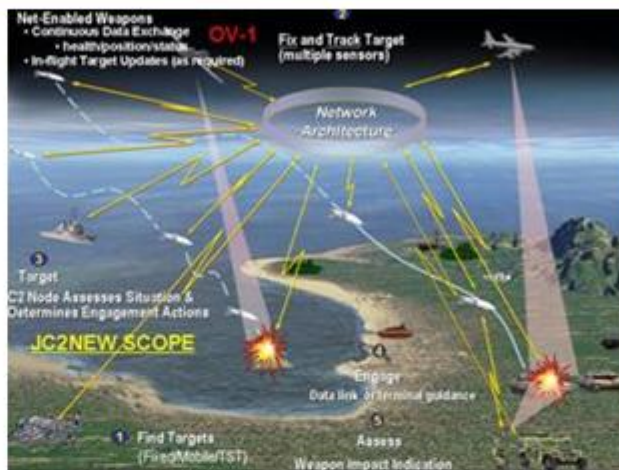
- **WDLN ACTD demonstrated NEW concept**
- **Current PORs implementing WDLN message set**
 - JSTARS, P-3 LSRS, F/A-18
 - JSOW-C-1, Harpoon Block III
- **Operational Need**
 - Current SuW targeting limited at range
 - Adverse weather capability limited
 - Most current SuW involves direct attack
- **Desired Capability**
 - All weather, stand-off SuW
 - FY-10 MUA



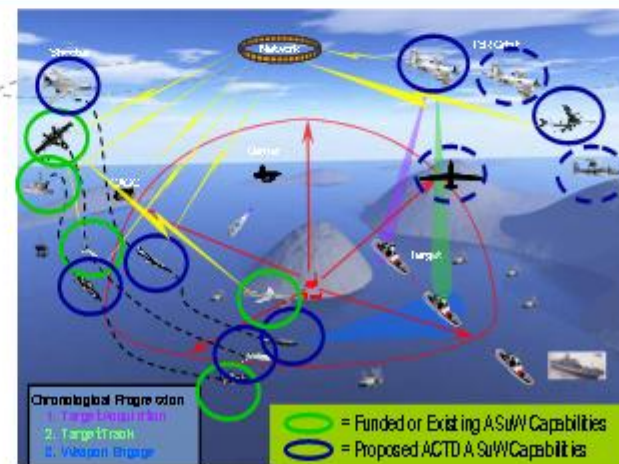
Net-Enabled Weapons Summary



WDLN ACTD



JC2NEW JT&E



JSuW JCTD