

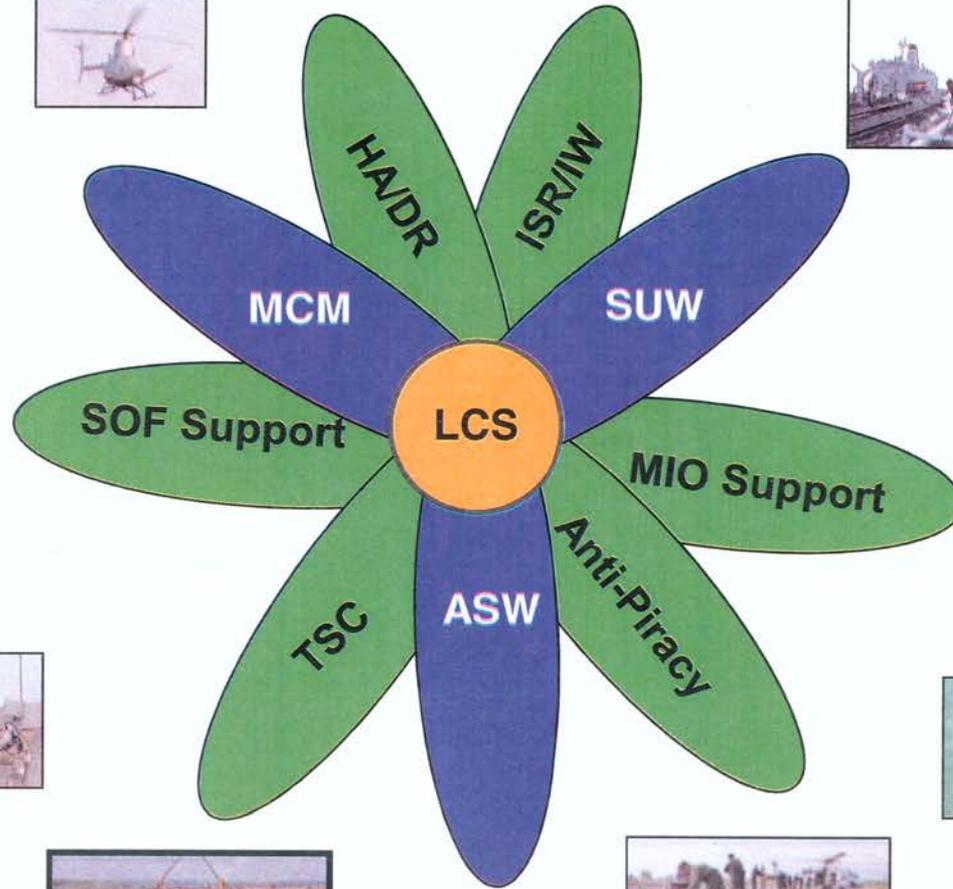
LCS and their Mission Modules in Asymmetric Warfare



CAPT John Uhl
10 September 2012



LCS Capabilities



-  LCS mission package
-  LCS inherent capability





Inherent Capabilities

Regardless of Mission Package Embarked

- **Maritime Domain Awareness Operations (MDA)**
 - Exclusive Economic Zones (EEZ) Patrols
 - Theater security/enforce laws/deter piracy
 - Coordinated patrols with regional partners
 - Increase area coverage
 - Improve proficiency operating with foreign navies
- **Theater Security Cooperation (TSC) Operations**
 - Community Relations (COMREL)/Distinguished Visitor (DV)/Media Engagement
 - Unique opportunities for diplomatic and mil-to-mil engagement
- **Bi-lateral / Multi-lateral Operations**
 - Joint exercises with regional partners
- **Humanitarian Assistance / Disaster Relief Operations**
 - Sprint Speed enables LCS to be the first responder
 - Mission Bay can be loaded with relief supplies
 - Shallow Draft enables greater access to remote areas





SUW: MIO/EMIO

- SUW with Maritime Security Module (MSM) capability is in high demand
- MH-60R & Vertical take-off and landing Tactical Unmanned Aerial Vehicle (VTUAV) detection & tracking
- High-speed intercept – 40+ knots
- MSM supports Level II Visit Board Search and Seizure (VBSS)
 - (2) 11M RHIBs / (2) Boarding Teams
 - Counter-illicit Trafficking (CIT)
 - Maritime Interdiction Operations (MIO)
 - Extended Maritime Interdiction Operations (EMIO)

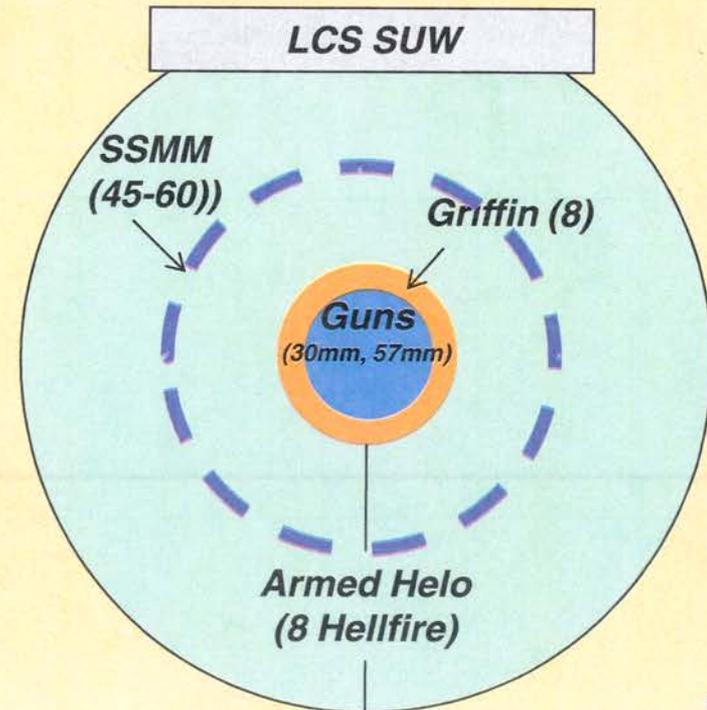


2010 deployment: FREEDOM completed 29 RHIB operations interdicting 5.5 tons of drugs



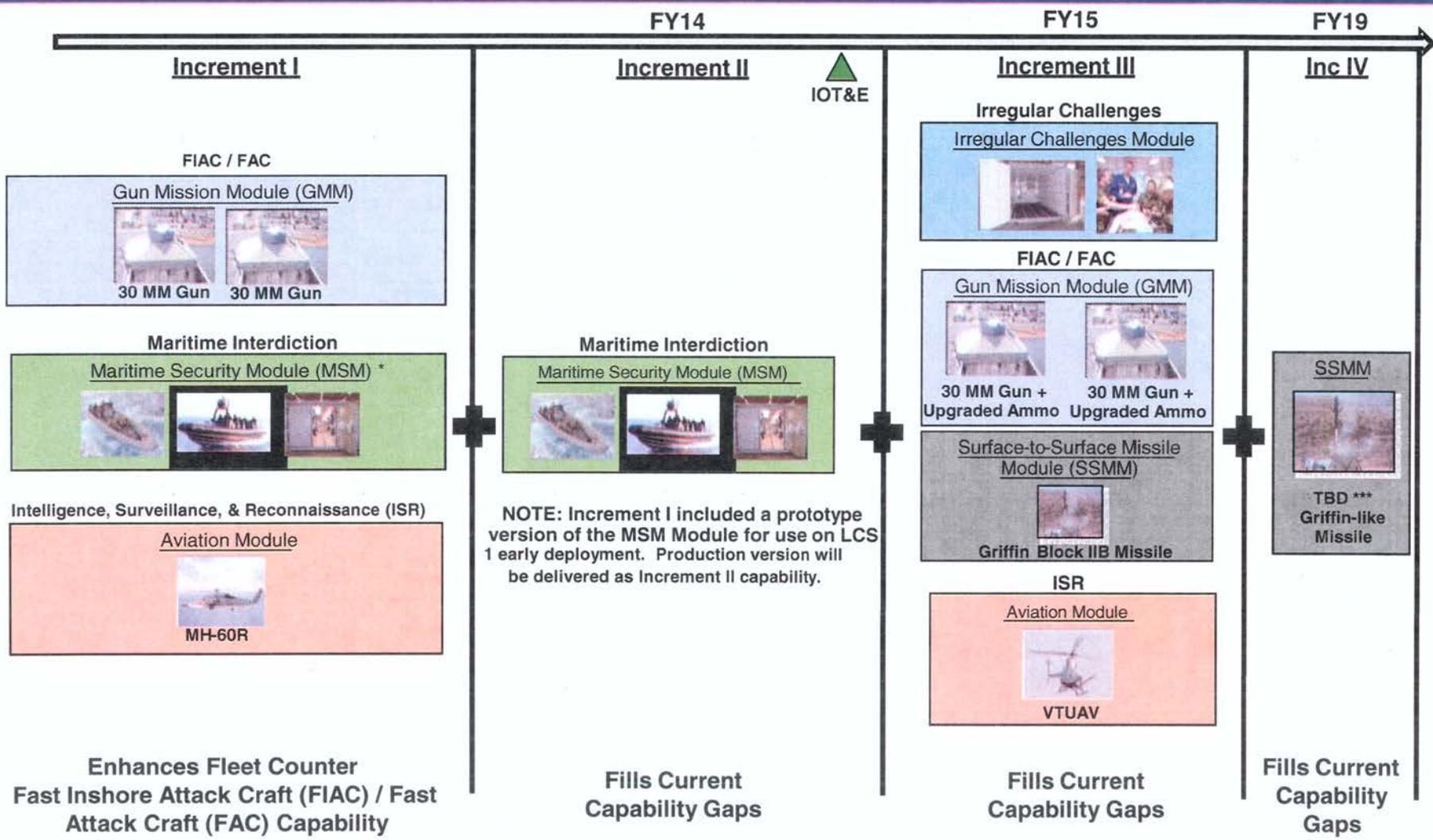
SUW: FAC/FIAC

- **LCS speed and maneuverability shapes engagements**
 - Speed and maneuver extend engagement opportunity and provide significant tactical advantage
- **MH-60R is an integral surveillance and engagement asset**
 - Detect and classify inbound raids beyond range of LCS
 - Rapid engagement of high priority threats with Hellfire
- **Gun systems provide layered defensive capability**
 - 57mm, 30mm, Crew Served Weapons (CSW)
- **Surface-to-Surface Missile Module (SSMM) Development**
 - FY14: Griffin Missile; short-range
 - FY17: Follow-on, fire-and-forget missile will extend range to/beyond horizon





SUW MP Capabilities



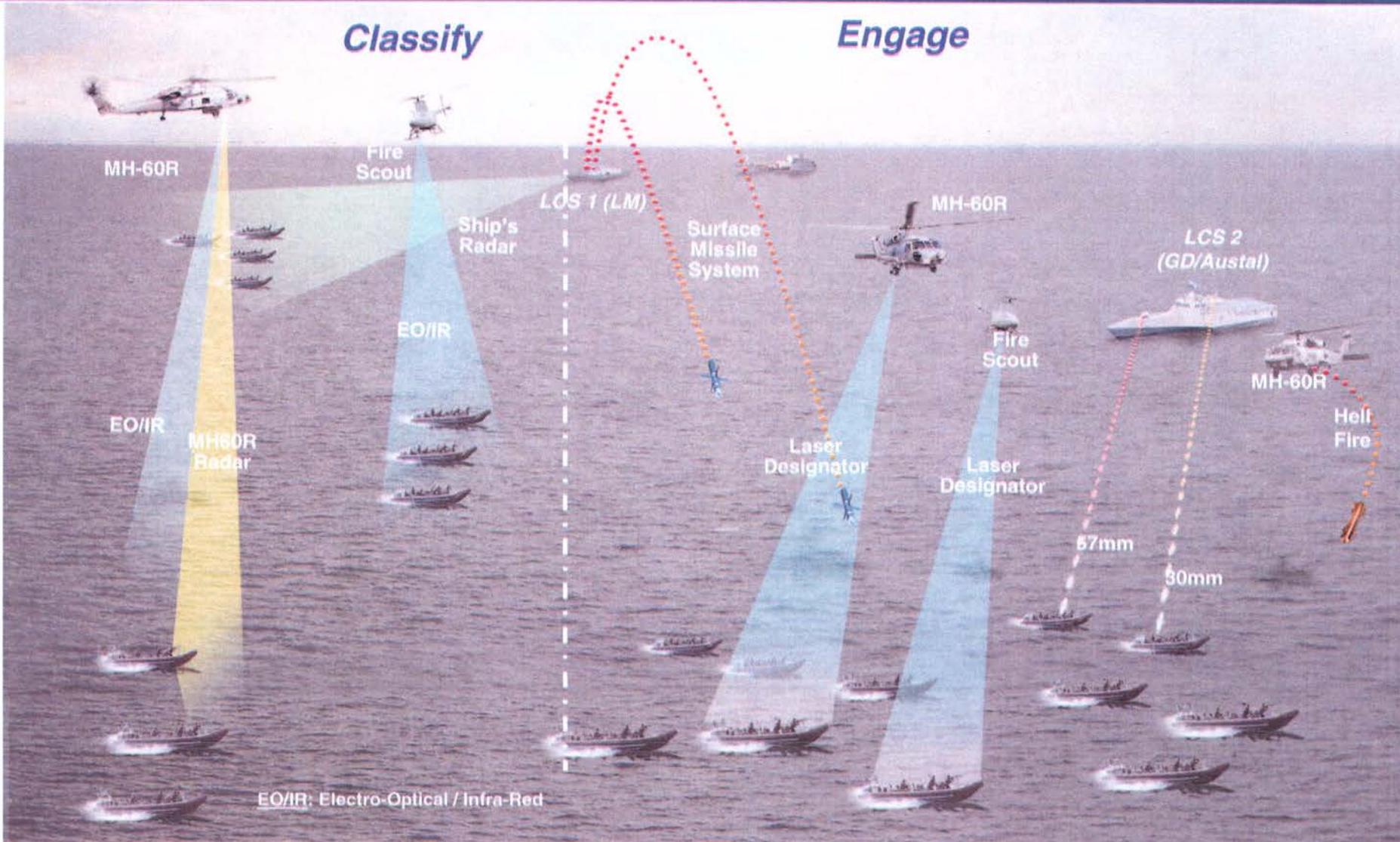
* Prototype version of the Maritime Security Module deployed on LCS 1.
 ** Irregular Challenges Module will provide a new Medical and Training capability to LCS and will be incorporated into the SUW MP beginning in Increment III.
 *** Increment II SSMM solution will be based on a full & open competition for a Griffin-like missile solution.



LCS SUW CONOPS

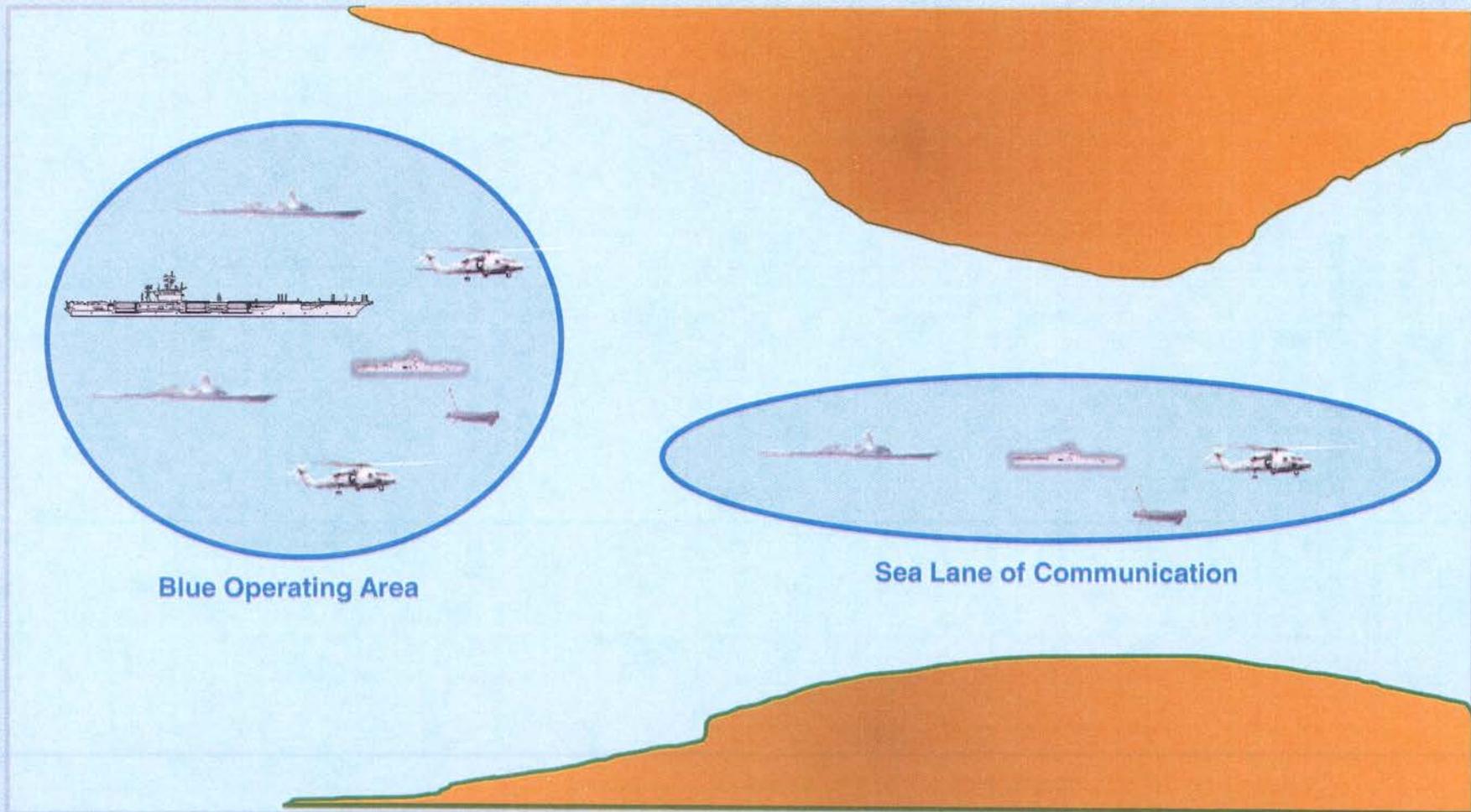
Classify

Engage





MIW: OPAREA and SLOC Clearance



Enables Freedom of Action in and Safe Transit Through Mined Waters



MCM MP Capabilities

FY14

FY15

FY17

FY19

Increment I



Rapid Minehunting & Clearing

Organic Airborne Mine Countermeasures Module



ALMDS



MH-60s



AMNS

Sustained Minehunting

Remote Minehunting Module



RMMV

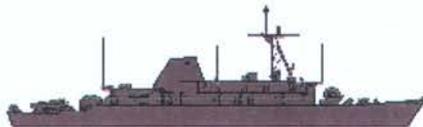


AQS-20As



RMMV

Replaces Legacy Minehunting and Neutralization Capabilities
Removes sailors from the minefield
Improves Clearance Speed/Endurance



Increment II

Beach Zone Detection

Coastal Mine Reconnaissance Module



VTUAV



COBRA Block I

Fills Current Capability Gaps

Increment III

Near Surface Neutralization

Organic Airborne Mine Countermeasures Module



AMNS Inc II

Sustained Influence Sweep

Influence Mine Sweep Module



USV



USSS

Replaces Legacy Minesweeping Capabilities and Adds Capacity



Increment IV

Buried Mine Detection

Unmanned Undersea Module

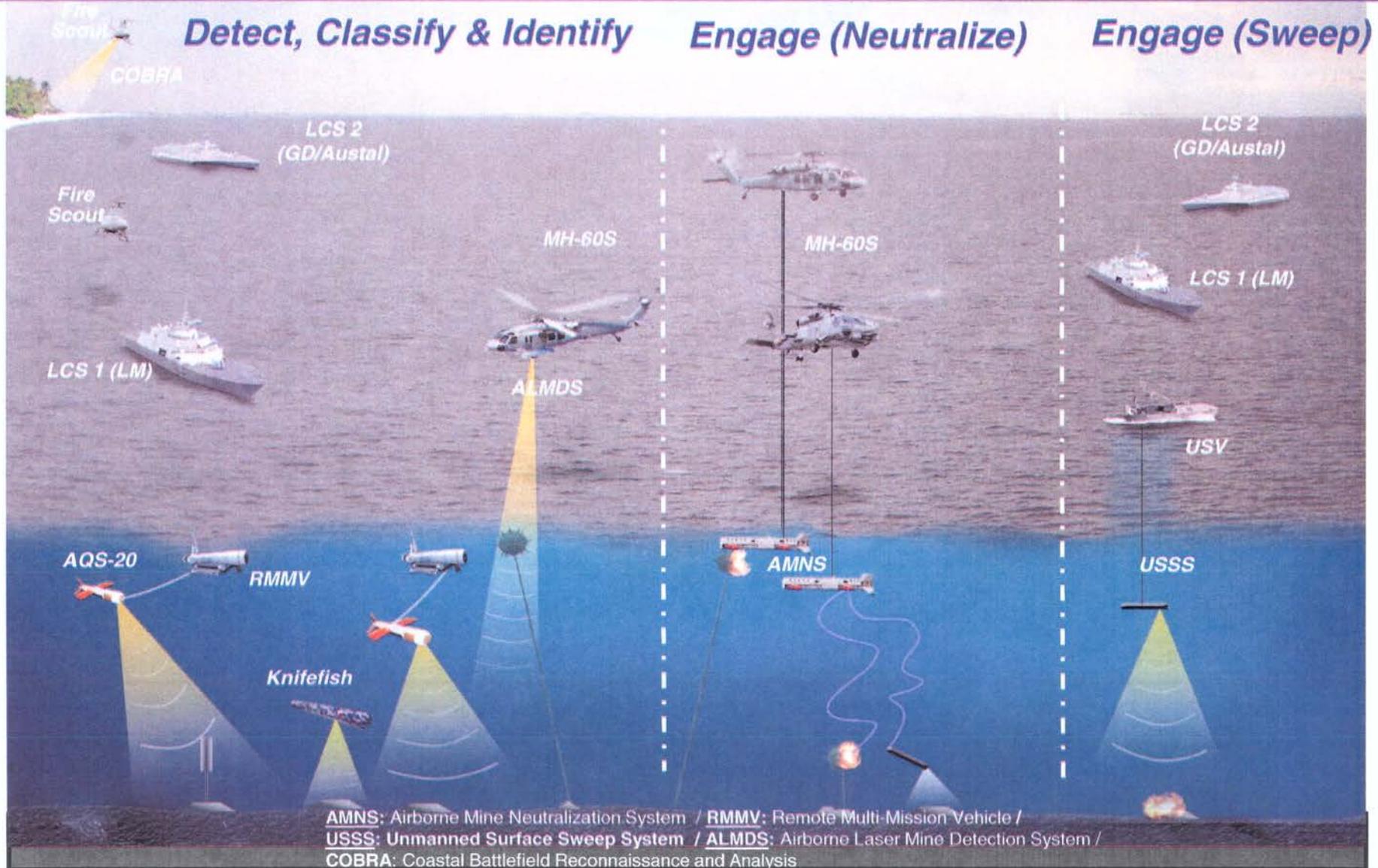


Knifefish UUV

Fills Current Capability Gaps



LCS MCM CONOPS





LCS in Asymmetric Warfare

- **LCS capabilities are both inherent and MP-specific**
 - Ship's speed, maneuverability, weapons...
 - MPs' mission-focused systems...
- **LCS flexibility provides potential for growth/enhancement**
 - To increase capabilities and pace the threat

LCS CAPABILITIES SPAN THE OPERATIONAL SPECTRUM