

Ms. Shannon Tighe
Product Director

Mr. Michael Upton
Deputy Product Director

Army Watercraft Systems Industry Day 5 December 2012

DISTRIBUTION STATEMENT A: Approved for public release;
distribution is unlimited. Content is Pre-Decisional.



Sail Army

Welcome



Purpose:

1. To provide Industry insight to pending and future Army Watercraft opportunities and technologies being considered and planned for Army acquisition
2. To improve the development of formal solicitations
3. To promote a Small Business subcontracting network

Objectives:

1. Enhance collaboration between Industry and the Product Director Army Watercraft Systems (PD AWS)
2. Rebuild industrial base capability
3. Lower cost of products and services through economical production rates and smart contracting methods
4. Improve operational efficiencies/conserves manpower
5. Inform Army watercraft requirement and solution efforts of Industry capability and interest



PD AWS Industry Day Agenda



- | | | |
|--|---|------------------|
| • Administrative Guidelines/Ground Rules | Mr. Michael Upton | 0830-0840 |
| • Opening Remarks | | |
| — Program Executive Officer Combat Support & Combat Service Support | Mr. Kevin Fahey | 0840-0850 |
| — Chief of Transportation | BG Stephen Farnen | 0850-0900 |
| • Life Cycle Manager's Overview | Ms. Shannon Tighe | 0900-0915 |
| • Pending Opportunities | | |
| — Landing Craft Utility (LCU) 2000 Service Life Extension Program (SLEP) | MAJ Zaltzman/
CW5 Tracy Underkoffler | 0915-0945 |
| — Research & Development | Mr. John McLeish | 0945-1015 |
| • Break | ALL | 1015-1025 |
| • Strategic Service Solutions (S3) | Mr. Michael Upton | 1025-1045 |
| • Requirements Perspective | COL Katherine Scanlon | 1045-1130 |
| • Small Business Participation | Ms. Dee Klaft | 1130-1145 |
| • Communication Process | Ms. Dee Klaft | 1145-1200 |
| • Government Responses to Questions | Panel | 1200-1300 |



Administrative Guidelines



1. This is a **non-smoking** facility.
2. Please **turn off** cell phones, smart phones and pagers
3. Restroom locations
4. Emergency exits



Ground Rules



1. Questions are encouraged and expected.
 - Unless requested, no verbal questions will be accepted.
 - Submit all questions on index cards provided.
 - Government will answer as many as possible during the session today
 - All questions and answers, and this presentation, will be posted to the website; the posted answers will serve as the official Government responses.
2. All program information and presented material remain pre-decisional.
3. Requirements specified in any requests for proposals, once released, will take precedence over Industry Day information.
4. Content is subject to change; nothing said or shown today is binding on the Government.



Opening Remarks



Mr. Kevin M. Fahey
Program Executive Officer
Combat Support & Combat Service Support



Opening Remarks



BG Stephen E. Farmen
Chief of Transportation



Life Cycle Manager's Overview



Ms. Shannon Tighe
Product Director
Army Watercraft Systems



Product Director Army Watercraft Systems (PD AWS)



Product Director (PD)

Ms. Shannon Tighe

MISSION

Life cycle management of Army watercraft integrating acquisition, logistics, and technology in the engineering, production, fielding, logistics support, modification, and disposal of the U.S. Army fleet of watercraft.

VISION

Acquisition expertise and cutting edge maritime capability for Army Watercraft Mission

AR 70-1 Army Acquisition Policy: PMs are responsible and accountable for the life cycle management of their assigned programs. As such, there is no transition of life cycle management responsibility away from the PM.

Our primary customers are the Soldier and the taxpayer. TCM-T is our primary interface with the Soldier.

SYSTEMS OF PRIMARY FOCUS

CAUSEWAY

- Roll-on/Roll-off Discharge Facility (RRDF)
- Floating Causeway (FC)
- Modular Warping Tug (MWT)
- Causeway Ferry (CF)

LANDING CRAFT

- Logistics Support Vessel (LSV 7 / LSV 1 classes)
- Landing Craft Utility (LCU 2000)
- Landing Craft Mechanized (LCM 8) MOD I & II

FLOATING CRAFT

- Large Tug (LT 800)
- Small Tug 900 (ST 900)
- 115 Ton Barge Derrick (BD)

FUTURE REQUIREMENT

- Family of Maneuver Support Vessels ICD

Army Watercraft Current Fleet



Landing Craft

107 Total Platforms

Floating Craft



Landing Craft Utility 2000 (LCU 2000)

34 total
(7 AC / 7 USAR / 20 APS)



Logistics Support Vessel (LSV)

8 Total
(5 AC / 3 USAR)



Landing Craft Mechanized (LCM-8) MOD I and MOD II

36 total
(11 AC / 15 USAR / 18 APS)



Barge Derrick Crane (BD 115)

4 Total
(0 AC / 2 USAR / 2 APS)



Small Tug (ST-900)

16 Total
(2 AC / 6 USAR / 8 APS)



Large Tug (LT-800)

6 total
(1 AC / 2 USAR / 3 APS)



Modular Causeway System (MCS)

3 Total Systems (1 AC / 2 APS)
 - RO/RO Discharge Facility (RRDF)
 - Causeway Ferry (CF)
 - Warping Tug (WT)
 - Floating Causeway (FC)

- Small density fleet
- Many different configurations
- Several platforms at or past EUL



Current Fleet Modernization



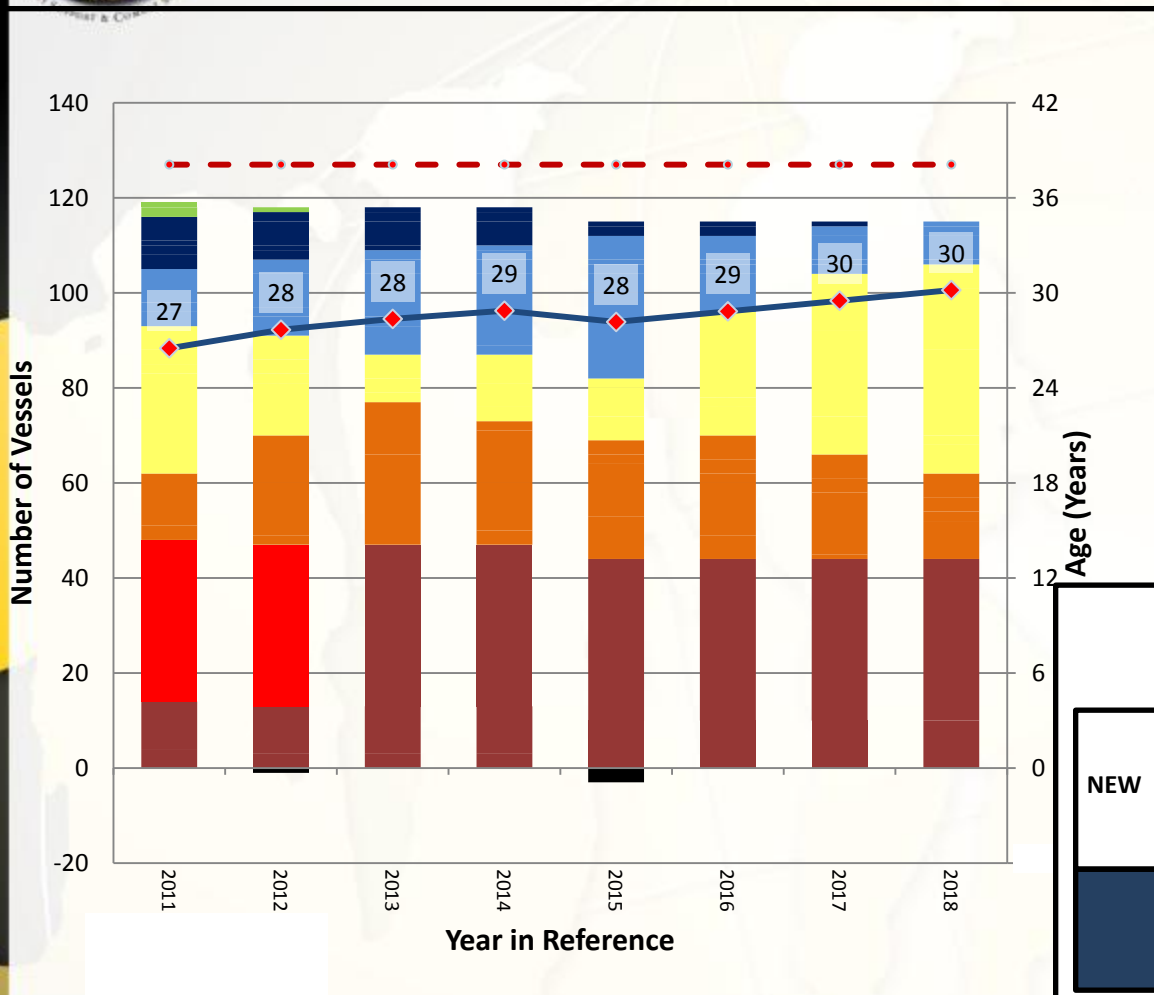
System	AAO/Fielded	Average Age in FY13	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY23	FY24 to FY30
LSV	8/8	23 Years	In service 1988 <i>SLEP</i> EUL = 25 years – 35 w/SLEP		Sustainment and Selected Modifications						FMSV-H (Incr II)	
LCU	34/34	22 Years	In service 1990 <i>C4ISR Mods</i> EUL = 25 years – 35 w/SLEP		<i>SLEP</i>						Sustainment and Select Mods	FMSV-M (Incr III)
LCM 8	36/36	42 Years	In service 1967 Sustainment and Select Mods						FMSV-L (Incr I)		Sustainment and Select Mods	
LT 800	8/6	19 Years	In service 1994 Sustainment and Select Mods								Medium Tug	
ST 900	16/16	12 Years	In service 1998 Sustainment and Select Mods								Medium Tug	
BD 115	5/4	13 Years	In service 1999 Sustainment and Select Mods		\$40M UFR in POM to fill AAO						BD Replacement	
BC	5/3	60 Years	In service 1957 Sustainment and Select Mods		Procure Double Hull Barge (UFR)		Sustainment and Select Modifications					
MWT	18/16	13 Years	In service 2004 Sustainment and Select Mods				Potential SLEP Incr I (UFR)		Sustainment and Select Modifications			
RRDF	6/6	11 Years	In service 2002 Sustainment and Select Mods						Potential SLEP Incr II (UFR)		Sustainment and Select Mods	
CF	3/3	7 Years	In service 2005 Sustainment and Select Mods						Potential SLEP Incr II (UFR)		Sustainment and Select Mods	
FC	3/3	11 Years	In service 1996 Sustainment and Select Mods						Potential SLEP Incr II (UFR)		Sustainment and Select Mods	

Funded, gets to AAO, EUL ok.
 Funding or AAO Issue
 Past EUL, no replacement
 Potential New Buy



Current Fleet Baseline

Composite Fleet - Includes LSV and LCU SLEP as Scheduled



- Sustainment Centric
- Rapidly Aging
- SLEP only Investment
- Future at Risk

Age Since Fielding

	1	6	11	16	21	31	41	DIVEST
NEW	-	-	-	-	-	-	41	
	5	10	15	20	30	40	+	





Pending Opportunities



MAJ Mario Zaltzman
Assistant Product Director

CW5 Underkoffler
Marine Engineer Manager

**Landing Craft Utility
(LCU) 2000
Service Life Extension
Program (SLEP)**

DISTRIBUTION STATEMENT A: Approved for public release;
distribution is unlimited. Content is Pre-Decisional.

Sail Army



Landing Craft Utility (LCU) 2000



- **Length: 174 feet**
- **Beam: 42 feet**
- **Draft (loaded): 9 feet**
- **Deck Area: 2,500 square feet**
- **Payload: 350 short tons (4 C-17 loads)**
- **Range (loaded): 6,500 nautical miles**
- **Speed (loaded): 10 knots**
- **Crew Size: 13 (2 Warrant Officers / 11 Enlisted)**
- **In Service: 1990**
- **Organization: 10 per Heavy Watercraft Company**



Mission:

- Worldwide and intra-theater transport of combat vehicles and sustainment cargo.
- Intra-theater movement from advanced bases and deep draft strategic sealift ships to ports, harbors, inland waterways, remote underdeveloped coastlines and unimproved beaches.

Special Features:

- Capacity:
 - ♦ 5 M1A2 tanks
 - ♦ 24 double-stacked 20-foot ISO container carrying capacity / 24 twenty-foot equivalent units (TEU)
- Bow ramp for beach landings and Roll-On/Roll-Off cargo transfer

Acquisition Objectives



- Best of Industry integration efforts
- Service Life Extension Program (SLEP)
 - Add 10 years to economic useful life for fleet of 34 LCU vessels
 - Improve the fleet configuration
 - Includes repower and other major modifications
 - Maintainability and Reliability
 - Corrosion Control
- On Condition Cyclic Maintenance (OCCM)
 - Three year periodic sustainment tasks
- Open communications with contractor
 - Quarterly Program Management Reviews (PMR)



PMR Objectives



- Schedule
 - SLEP and OCCM of pilot and production vessels within schedule
 - Operational qualification tests with minimal disruptions
- Cost
 - Minimize changes to the contract
- Performance
 - Achieve requirements thresholds
 - Build in reliability
- Supportability
 - Component availability, e.g. engines will be a focus
- Risk identification, mitigation, assessments
- Exit criteria for Phase 1, Pilot program



Acquisition Strategy



We Need Industry Feedback

Phase 1: Pilot [2-year period of performance]

- Integrate SLEP modifications and OCCM sustainment tasks on two pilot vessels
- Test pilot vessels to achieve performance requirements
- Conduct operational test
- Refine design
- Develop integrated logistics support products and develop/deliver all associated technical data packages (TDP)

Phase 2: Production [6-year period of performance]

- Based on Phase 1 TDPs, integrate SLEP modifications and OCCM sustainment tasks on 32 LCU vessels
- Conduct associated operational testing

Full & Open Competition for both Phases!



Proposed Program Schedule



First Article Test



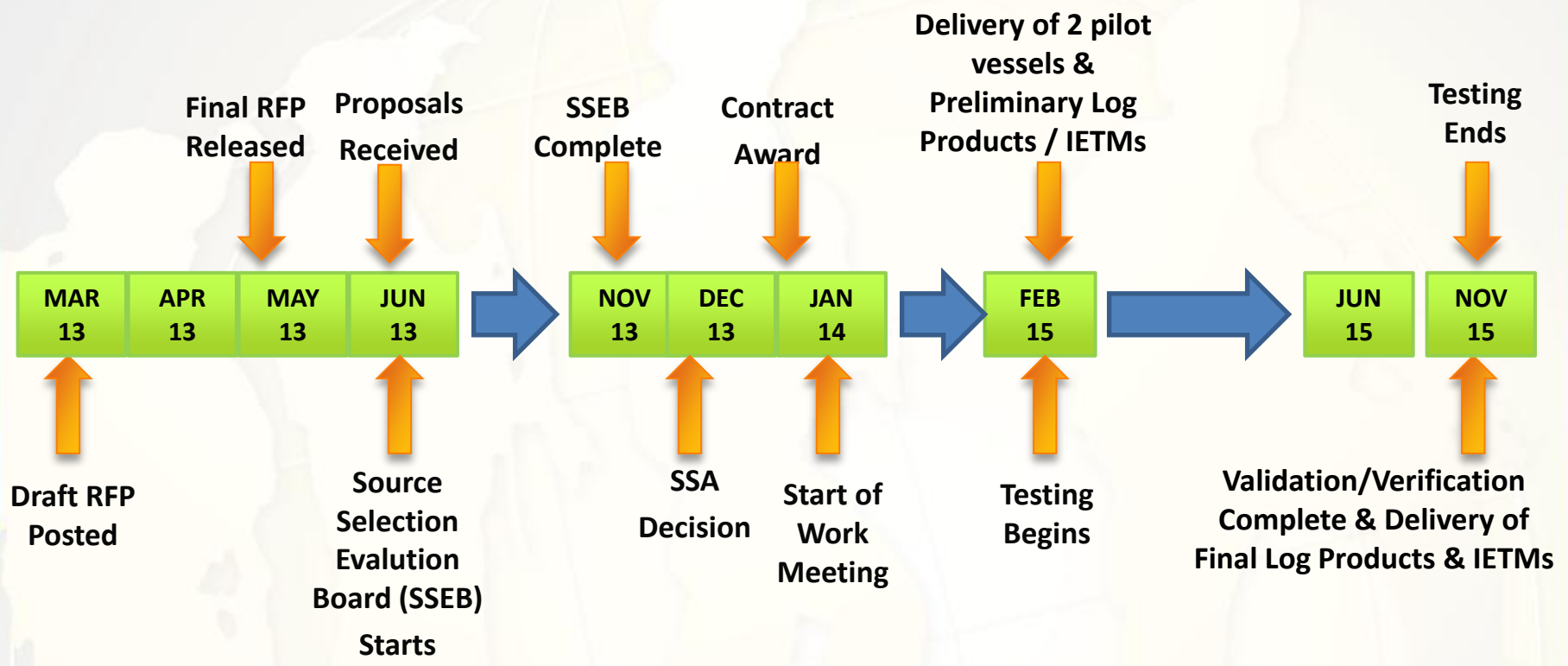
	PHASE 1 (Pilot)		PHASE 2 (Production)					
	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21
SLEP / OCCM	2	0	4	4	6	6	6	6



Deliverables Complete to include vessels, TDP, & associated Log products/IETMs



Phase I Draft Acquisition Timeline



Proposed Phase 1 Contract



- Full and Open Competition
- One contract award
- Contract Type: Firm Fixed Price (possibly Cost CLINS for unknown conditions)
- Requirements/Deliverables for Phase I
 - Design, integrate, and test two pilot vessels
 - Provide test support
 - Deliver a TDP in Government format
 - Develop integrated logistics support products including IETMs; Technical Data; Packaging, Handling, Storage & Transportation; Training Support Package; Maintenance; Supply; and Support Equipment
- Two-year period of performance



Proposed Phase 2 Contract



- Full and Open Competition
- One contract award
- Contract Type: Firm Fixed Price
- Six-year period of performance
- Incrementally exercised
- Base Requirements
 - Initial SLEP modifications and OCCM sustainment tasks for four LCU vessels
 - First Article Test to verify that it meets requirements
 - Develop any necessary changes to the integrated logistics support products including IETMs
- Options
 - Remaining SLEP modifications and OCCM sustainment tasks for 28 LCU Vessels
 - Provide Contractor Field Service Representatives (CFSRs)



Technical Discussion



CW5 Tracy Underkoffler
Marine Engineer Manager
Army Watercraft Systems



Elements of SLEP & OCCM



KEY:
SLEP
OCCM

Force Protection Upgrades

- Ballistic Shielded Gun Mounts
- Improved MK 93 Gun Mounts
- Battle Armor Stowage Boxes
- Ammo Lockers
- Additional gun Mounts
- LRAD power sources

Air Conditioning Units

- New System Installation
- Improved Performance

Miscellaneous Upgrades

- Anchor Handling Upgrade
- Galley & food Storage Upgrades
- Shower & Head Upgrades
- New Flood Lights
- Permanent Mount for SCBA Fill Station

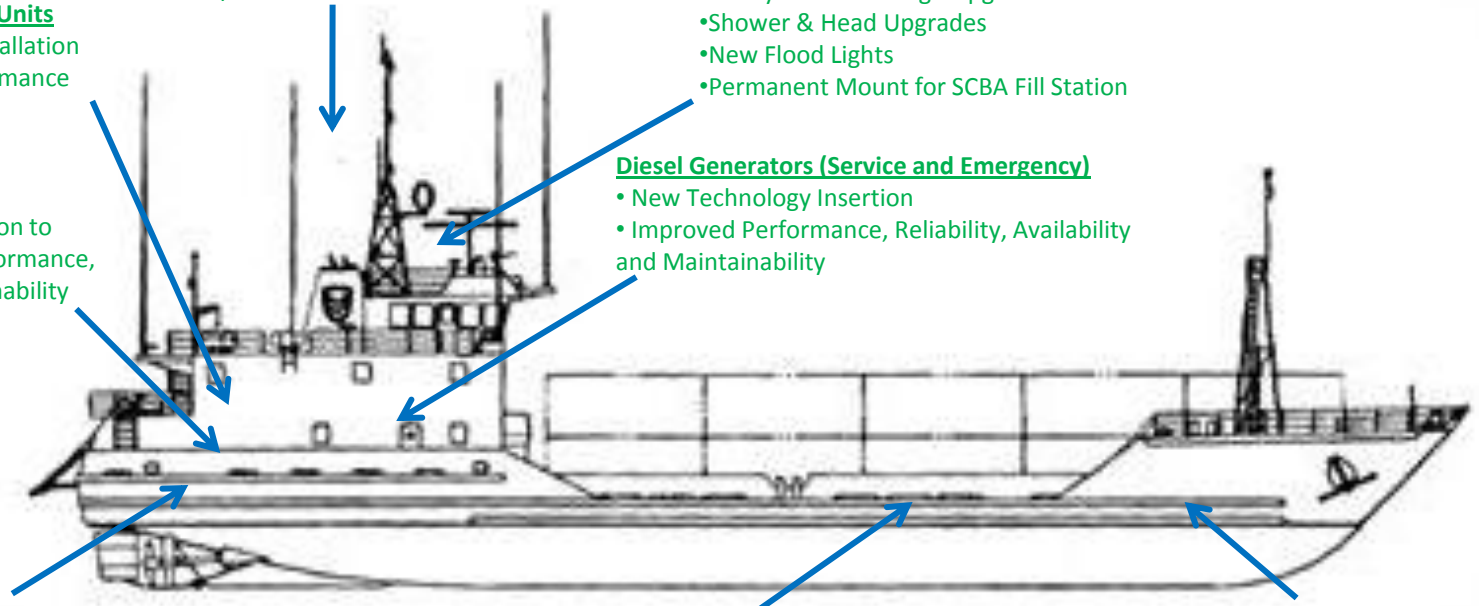
Main Propulsion

Diesel Engine

- New System Installation to include improved Performance, Reliability and Maintainability

Diesel Generators (Service and Emergency)

- New Technology Insertion
- Improved Performance, Reliability, Availability and Maintainability



OCCM

- Sustainment Maintenance of all Tanks and Machinery
- Repair / Refurbish Corrosion areas
- Blast and Paint Underwater Hull and Topside

Piping and Structural

- Replace Black Iron piping with Cu Ni
- Stowage area improvements

Bow Thruster Engine

- New Technology Insertion
- Improved Performance, Reliability, Availability and Maintainability



Research & Development (R&D)



Mr. John McLeish
Assistant Product Director
Army Watercraft Systems



R&D Strategy



Seaworthiness - Safety - Survivability - Supportability - Reliability



Environmental and energy efficiency - increasingly stringent regulatory requirements, fuel efficiency and single fuel initiative compliance

Operational testing of externally mounted **supercargo berthing**

Battle Command on the Move (BCOTM) and **Common Operating Picture (COP)/interoperability** aspects of C4ISR

Escalation of Force (EoF) force protection enhancements; lethal and nonlethal

Terminal Operations (ship to shore) and **At Sea Transfer**

Real time **digital logistics management**, area situational awareness, trend analysis, CBM+, equipment monitoring and diagnostics/prognostics



Study, develop, and test emergent technologies to support future acquisitions and future fleet planning as those areas are to be imminently informed by the Army Watercraft Systems (AWS) Board of Directors (BoD)

RIVERINE	THEATER AND PORT OPENING	TACTICAL MANEUVER
AMPHIBIOUS	INTRATHEATER SUSTAINMENT	AT SEA TRANSFER



R&D Key Points



Purpose: To inform acquisition planning, requirements generation, and AWS Board of Directors (BOD) decision making

- Army Watercraft R&D is Component Technology Centric
- Primary purpose: Mature emerging component technologies for current and future fleet
 - Target Technological Readiness Level (TRL) 6 & 7 components
 - Also target components with a high Manufacturing Readiness Level
- Secondary purpose: Scalability
- Message to industry:

We typically work our RDTE projects through Government and private industry R&D organizations. Unlike other Government product offices, we do not currently have vessel original equipment manufacturers (OEMs) supporting us.



What We Are Looking For



Energy Efficiency

- **Fuel efficiency** technology and methodology
- **Hybrid/alternative technology auxiliary and main drive** systems
- **Advanced battery** application, e.g. lithium ion.
- **Diesel-centric**, multi-fuel potentials; outboard motor applications

- Catalytic
- Additive
- Operational



- Diesel Primary
- JP-8 / Gasoline



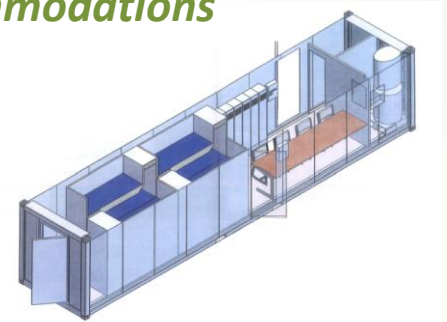
Environmental Compliance

- **Waste stream processing** technologies to meet emergent regulatory requirements
- Marine Sanitation Devices
- Potable Water Technology, e.g. **ballast water treatment**.



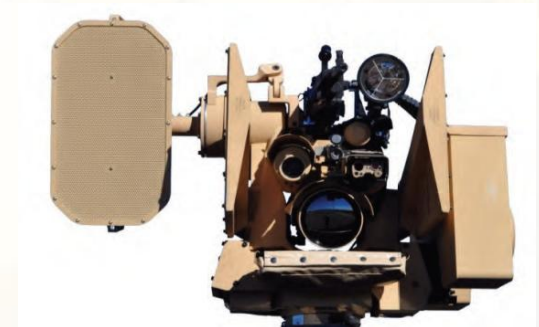
Supercargo Berthing

US Coast Guard safety compliant *work and sleeping accommodations* for passengers, other than vessel crew



Force Protection

- Small arms and rocket-propelled grenade protection
- *Under water explosive device detection*
- Defense against small boat unit tactics
- Lethal & Non-lethal Escalation-of-Force (EoF).

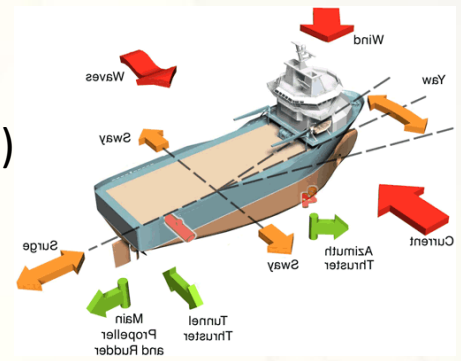


What We Are Looking For (continued)



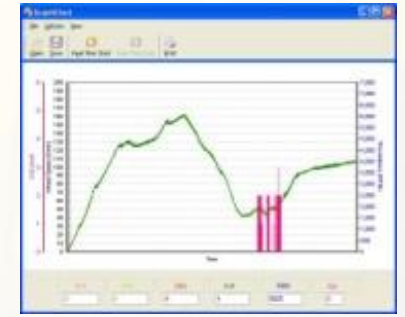
At Sea Transfer

- *Heave compensation/stabilization*
- *Dynamic positioning*
- *At sea transfer* supportive technology (e.g. ramp to ramp)



Digital Logistics Management

- Data logging
- *Electronic logbook functionality*
- *Integration with* STAMIS (GCSS-A) to support CBM+, trend analysis, diagnostics/prognostics, real or near real time fuel usage, OPTEMPO



What We Are Looking For (continued)



Command, Control, Communications, Computers, Intelligence, Surveillance & Reconnaissance (C4ISR)

- *Battle Command on the Move*
- *Common Operating Picture*
- *Interoperability*

Extend Economic Useful Life (EUL)

- Current Army Watercraft built to an Industry standard of a 25-year EUL
- Goal for future acquisition is 35-40 years EUL!
- *Corrosion measurement and quantification* approaches
 - Inner and outer hull
 - Systemic means for inspecting and tracking (and managing) effect long term.

•Coatings
•Cathodic
•Predictive

Advanced Hull
design &
structure



Opportunities



Stiletto

- An Office of the Secretary of Defense (OSD) Research Vessel
- Managed by Naval Surface Warfare Center Carderock Division-Norfolk
- If technology is accepted, Stiletto will collect data and write report

Enterprise Market Investigation Process (EMIP)

- Multi-phased and ongoing type of market research sponsored by PEO CS&CSS
- Involves conducting periodic technology demonstrations that educate government representatives in advanced technologies at the component or subsystem (not end item) level
- Technologies accepted for demonstration have achieved Technology Readiness Level (TRL) 6 or better

For additional information as well as instructions to submit your technologies for consideration, visit <http://www.peocscs.army.mil/EMIP.html>.



Opportunities (continued)



Partner with TARDEC or NAVSEA



Send your promising technologies to CW5 Tracy Underkoffler, AWS Marine Engineer Manager, at tracy.d.underkoffler.mil@mail.mil



Future Opportunities



Mr. Michael Upton
Deputy Product Director
Army Watercraft Systems



Strategic Service Solutions (S3)



- Will **replace** the Army's PEO CS&CSS and TARDEC Omnibus contracts and use of the Field and Installation Readiness Support Team (FIRST) logistics support contracts. The PEO CS&CSS Omnibus set of contracts are currently held by 16 companies which are set to expire in December 2013. The FIRST set of contracts are held by 34 companies which are set to expire in 2014.

Estimated solicitation date: 2QFY13

Estimated award date: 1QFY14

Estimated value: \$4B

<http://contracting.tacom.army.mil/services/S3/S3.htm>

- The Government anticipates that S3 will utilize the following three North American Industry Classification System (NAICS) Codes:

(1) 541330 - Engineering Services

(2) 561210 - Facilities Support Services

(3) 541712 - Research and Development in the Physical, Engineering, and Life Sciences (except Biotechnology)



Potential S3 “White-Collar” Tasks



- Means to supplement the Army workforce pertaining to its mission for “professional” disciplines
- CONUS and OCONUS performance locations
- Commercial and non-commercial in nature



Examples of “White-Collar” Tasks



1. Acquisition Management
2. System Design, Engineering and Integration
3. Training Services
4. Test & Evaluation
5. Technical Manuals
6. Business Case Analysis
7. Software upgrades
8. Advisory and assistance Services
9. PM project planning and scheduling
10. Consulting Services
11. Cost estimating services
12. Program planning, audits, and evaluations
13. Studies, analyses, and reports relating to an agency's mission



Potential S3 “Blue-Collar” Tasks



- Means to supplement the Army workforce pertaining to its mission for “non-professional” disciplines
- CONUS and OCONUS performance locations
- Commercial and non-commercial in nature



Examples of “Blue-Collar” Tasks



1. Field Maintenance
2. Equipment inspections
3. Repair on-site to 10/20 standards
4. Equipment modification
5. Material and Package Fielding including Total
6. Maintenance of Army vehicles
7. Configuration Management, testing and evaluation
8. Logistics analysis, trade-off studies
9. Contractor Logistic Services (CLS)
10. Modification Work Orders
11. Supply Chain Management



Potential S3 “R&D” Tasks



- Means to maintain strong advanced science & technology base to address War Fighters’ needs with innovative capabilities
- Will primarily support TARDEC, the Department of Defense’s Full Life Cycle engineering support provider for all manned and unmanned ground vehicle systems
- Support other TACOM LCMC agencies’ R&D needs



Examples of “R&D” Tasks



1. Expertise in novel and innovative design
2. Advanced automotive engineering
3. Support Test, Evaluation, and Demonstration activities
4. Production and Deployment processes and activities
5. Design Process
6. Prototyping
7. Manufacturing expertise in military, specialty, and performance vehicles (e.g., motor sports)
8. Computer Aided Design Data Format and Submission
9. Laboratory Support
10. Verification & Validation





United States Army Combined Arms Support Command Sustainment Center of Excellence



US Army Watercraft Industry Day 5 December 2012

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited. Content is Pre-Decisional.



COL Katherine A. Scanlon
TRADOC Capability Manager – Transportation
katherine.a.scanlon.mil@mail.mil
(804)765-7256

PD AWS Industry Day 5 Dec 12

Unclassified/Pre-Decisional *Support Starts Here!*

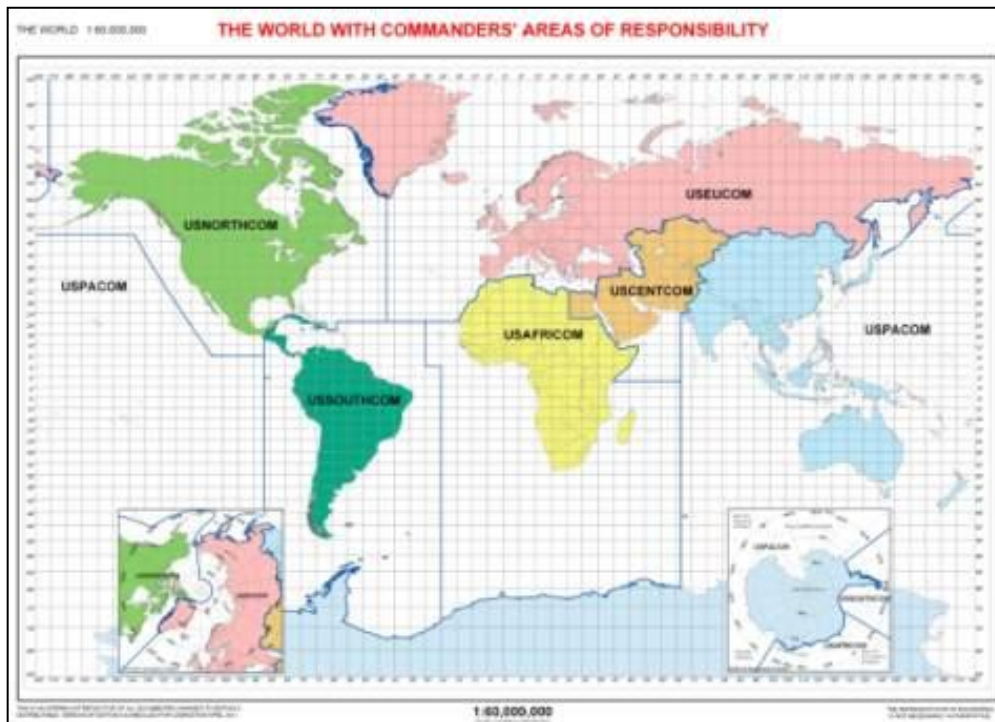




Army 2020 Operational Environment

Prevent Shape Win

- Counter Terrorism and Irregular Warfare
- Deter and Defeat Aggression
- Project Power Despite Anti-Access/Area Denial Challenges
- Counter Weapons of Mass Destruction
- Operate Effectively in Cyberspace and Space
- Maintain a Safe, Secure, and Effective Nuclear Deterrent
- Defend the Homeland and Provide Support to Civil Authorities
- Provide a Stabilizing Presence
- Conduct Stability and Counterinsurgency Operations
- Conduct Humanitarian, Disaster Relief, and Other Operations



Futures

The Probable

The Possible

The Unthinkable

Global Trends

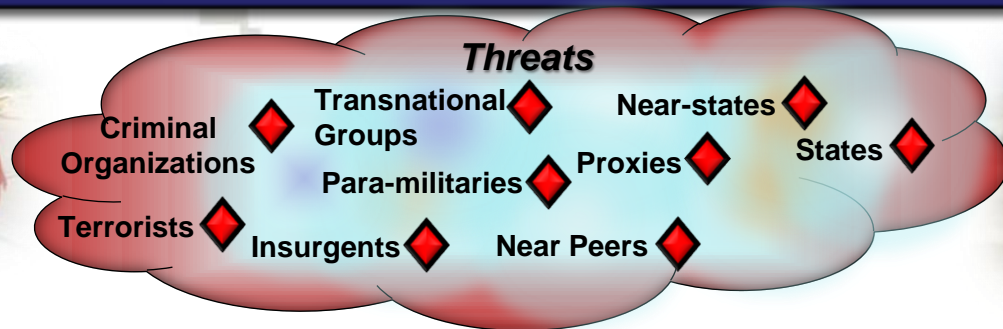
- WMD
- Demographics & Migration
- Cyber
- Rise of Asia
- Growing Debt
- Arab Spring
- Regional Aggression
- Economic Malaise
- Competition for Space
- Shifting Alliances
- Persistent conflict Among the People
- Competition for Space
- Crime
- Proliferation, Globalization, Modernization
- Resource Competition
- Pacific focus
- Technology Proliferation
- Extremism

A dynamic and rapidly changing security environment





A Wide Range of Potential Challenges



- Driven by Competition for:**
- Wealth
 - Resources
 - Political authority
 - Influence
 - Sovereignty
 - Identity
 - Legitimacy

Unexpected opportunists and suppressed threats will emerge from conflicts in a complex environment

Lethal: weapons technology proliferates to all forces, no longer linear relationship between economic and military power



- Complex Environment:**
- Multiple Actors
 - No Controlling Actor
 - Asymmetric Threats
 - Chaotic Conditions
 - Extreme Complexity
 - Technology Enabled
 - Information Domain

Enduring: persistent adversaries, difficult to defeat with blurred transitions from conflict to post-conflict.

- Shaping Forces:**
- U.S. Dominance
 - Radical Ideology/Theology
 - Technology Proliferation
 - Social Media access
 - Demographics
 - Economics
 - Cyber

The Army must be operationally adaptive to defeat these complex challenges that will blur the distinctions of past conflict

Asymmetric: sidestep U.S. preferred way of war, deny ISR and strike options, exploit cyber, protract conflict, and project conflict to the homeland





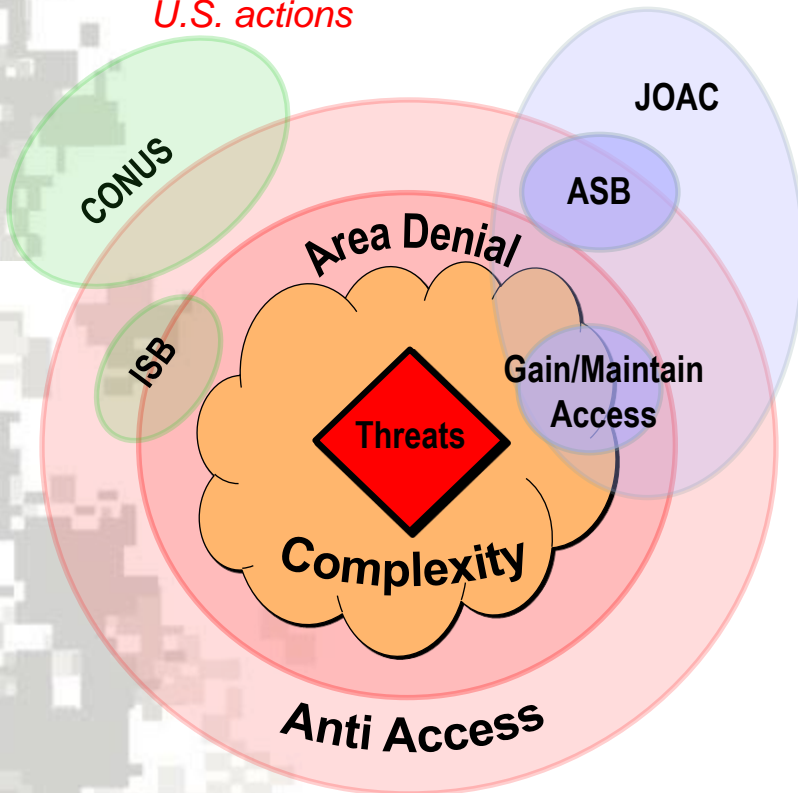
Character of Conflict 2020

Threat components:

- Nation States or Proxies with a range of capabilities
- Desire to preclude U.S. from executing its “way of war”
- Capabilities that affect the strategic calculus -- missiles, nuclear weapons and terror sponsorship ... *specifically designed to impact U.S. actions*



Capabilities:
 SAMs, MANPADs,
 ATGMs, Rockets, IEDs



- Anti-access and area denial campaigns ... strategic thru tactical levels
- Engage at small unit level where they perceive a greater chance to obtain overmatch and achieve success
- Use violence, intimidation and coercion against U.S. supporters
- WMD capable... but still seeking nuclear
- Avoid detection and targeting by operating among the people
- Slow down or halt our momentum using anti-tank missiles, IEDs, air defense and SOF
- Increased use of robotics and unmanned aerial systems
- Employ electronic warfare to counter US precision and C4ISR
- Conduct sophisticated information campaigns designed to erode US will and support

The Army must be capable of decisive action against a wide array of adaptive and complex threats





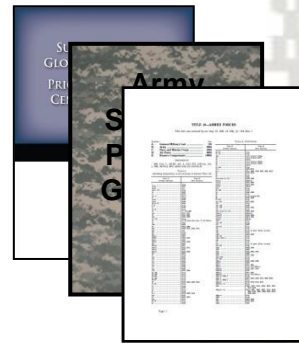
Strategic Guidance

Priorities for the 21st Century Defense

- **Deter and Defeat Aggression**...conducting combined arms campaign across all domains... US forces will plan to operate whenever possible with allied and coalition forces.
- **Project Power Despite Anti-Access/Area Denial (A2/AD) Challenges**...US military will invest as required to ensure ability to operate effectively in A2/AD environments
- **Defend the Homeland and Provide Support to Civil Authorities**...come to assistance of domestic civil authorities in event of such defense fails or natural disasters, potentially in response to a very significant or even catastrophic event.
- **Conduct Humanitarian, Disaster Relief and Other Operations**...US forces possess rapidly deployable capabilities, including airlift and sealift, surveillance, medical evacuation and care, and communications invaluable in supplementing lead relief agencies, by extending aid to victims of natural or man-made disasters, both at home and abroad.

USC Title X...“In general, the Army, within the Department of the Army, includes land combat and service forces and such **aviation and water transport** as may be organic therein.”

Army 2020 “...the Army must re-invigorate capabilities that have declined, develop new capabilities for the changing world and adapt processes to reflect the broader range of requirements.”



One of the CSA's Four “Selected High Payoff Investment Areas” is High Speed/Austere Access Sealift





Army Watercraft Types & Capabilities

1



Harbormaster C3



Landing Craft Mechanized Mod 2

2 & 3



Logistics Support Vessel



Landing Craft Utility



Landing Craft Mechanized Mod 1

3



Barge Derrick



Small Tug



Containerized Maintenance Facility



Large Tug

Principal War Fighting Functions

- 1. Mission Command:** Harbormaster, LOTS and Battle Command on the Move
- 2. Movement & Maneuver:** Assured Access, Simultaneous/ Distributed Operations, Controlled Operational Tempo
- 3. Sustainment:** Intra-Theater Distribution, Access to Degraded & Austere Ports/Seaport, Damage/Vessel Salvage, Tugs/Firefighting and Rescue

3 Modular Causeway Systems



Roll-on/Roll-off Discharge Facility



Causeway Ferry



Warping Tug



Floating Causeway





Current Fleet Design Background – Primarily Sustainment

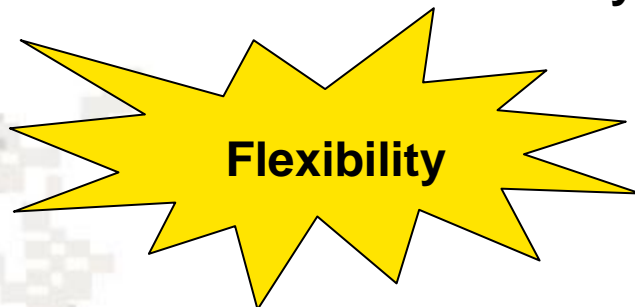
No Fixed Ports

Saturated Fixed Ports

Inadequate Port Facilities

- **Damaged**
- **Denied**
- **Draft restricted**
- **No crane support**
- **Limited container support**
- **No RO/RO ramps**
- **Lack of Port Capacity**

Lack of Airfield Availability



**80-90% of equipment, munitions, and supplies move by sea.
Infrastructure critical to warfighting capability**



Current Landing Craft Characteristics and Capabilities



Characteristics:

- Crew - 3
- Operating speed - 9 Knots Loaded
- Range - 270 Nautical Miles
- Length - 73 Feet
- Draft - 5 Feet

Cargo Capacity:

- 53 short tons



Characteristics:

- Crew - 32
- Full load speed - 11.5 Knots
- Range - 6,500 NM Loaded, 8200 NM Light
- Length - 273 Feet (1-6), 314 Feet (7-8)
- Draft - 12 Feet Loaded, 6 Feet Light

Cargo capacity:

- 2000 short tons
- ** 1 LSV load = 32 C17s



Characteristics:

- Crew - 12
- Operating speed (loaded) – 10 Knots
- Range – 6500 Nautical Miles
- Length – 174 Feet
- Draft – 9 Feet Loaded, 8 Feet Light

Cargo capacity:

- 350 short tons (320 t)
- ** 1 LCU load = 4 C17's





Tactical / Operational – Army Watercraft Capabilities

Deliver combat-configured, mounted maneuver company teams or sustainment during all phases of the campaign

- Movement & Maneuver of intact combat forces
- Provide operational flexibility by extending the ground commanders maneuver space
- Multiple platforms to permit simultaneous projection of tailored, modular force packages
- Enable sustainment to the joint force via multiple sea lines of communication
- Provide coastal / inland waterway MSR to bypass congestion and / or interdiction of land MSR

Enable austere access to overcome anti-access and support theater opening

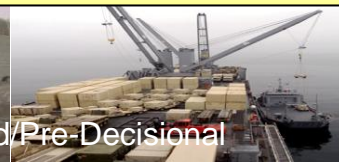
- Joint Operational Environment - Shift to less capable and austere ports may limit strategic sealift access
- Logistics Over The Shore (LOTS) using Army watercraft provide 90% access (LMSR=15%)
- Reduce size of deployment infrastructure
- Enable the use of multiple entry points to achieve momentum
- Reduce predictability and vulnerability

Key link to Army mission – Seaport opening and coastal / inland waterway distribution

- Overcome poor infrastructure (water MSR LOC vs poor road network)
- Mitigate threat / uncertain commercial support
- Provide harbor / port salvage and heavy lift
- Serve as distribution platform

Support rapid response for natural disasters and humanitarian relief efforts

Army Watercraft Executes Movement & Maneuver And Sustainment!





Family of Maneuver Support Vessels (FMSV)

Modernization Strategy is focused on Landing Craft Capability

- No Funding, Capabilities or Requirements Fully Developed yet
- Refine Emerging Roles and Responsibilities for Army 2020 and Beyond

Current Efforts:

- U.S. Army Logistics Innovation Agency Market Research for Commercial Capabilities
- Conduct a study in conjunction with the Maneuver Center of Excellence, Concepts Development Division

Potential Capabilities:

- Movement & Maneuver of Ground Forces and Materiel
- Rapid Repositioning of Forces and Sustainment
- Mitigate Austere and Anti-Access
- Multi-entry Point Options for Rapid Theater Opening
- Enable Seaport Operations and Coastal Distribution
- Joint Interoperability – Joint Capabilities and Concepts

Modernization Priorities:

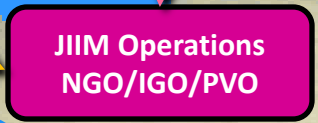
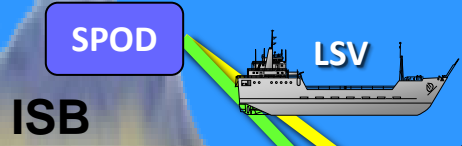
- Landing Craft
- Incremental displacement of current capabilities by age
 - Landing Craft Mechanized-8 (FMSV-Light)
 - Logistics Support Vessel (FMSV-Heavy)
 - Landing Craft Utility-2000 (FMSV-Medium)



Waterborne Movement & Maneuver

- Move Decentralized Force Elements from Staging/Support Base to Point of Employment
- Shift and Support Widely Distributed Force Elements, Multi-National/Agency Operations
- Move Cargo from Strategic Shipping to Ports, Austere Bases, & Deployed Force Elements
- Move Heavy Sustainment Support from Land Bases to Deployed Forces

Agility
Flexibility
Versatility
Integration
Synchronization



Sustained Land Operations



- Vision:**
- Provide a watercraft fleet capable of supporting Movement & Maneuver of combat ready forces and distributed support & sustainment in a 2020 OE
 - CCDR/ASCC Theater OPLANs and Engagement
 - Theater Security Cooperation
 - Security Force assistance; Capacity building
 - Humanitarian Assistance/Refugee Aid/Disaster Relief
 - Day to Day Efficient/Effective Mission Support



What Do We Need?

More Capable Watercraft

- Increased speed and cargo capacity (payload and passengers)
- Increased range and survivability
- Improved operational/fuel efficiency
- Aligns with strategic lift capabilities
- Net capable/ready

Operational to Tactical Watercraft

- To support assured access, tactical movement and support operations in unimproved ports, coastal access areas and inland waterways

Replace Aging Watercraft Lift Platforms

- To support closure, movement and sustainment of distributed forces operating in anti-access and access denial environments

Waterborne transport

- For future Army formations (squad/platoon), to include troops, cargo and combat-configured equipment





Questions?

TRADOC Capability Manager – Transportation (TCM-T)

COL Katherine A. Scanlon
Director, TCM-T

katherine.a.scanlon.mil@mail.mil

(804)765-7256

Mr. Don Overton
TCM-T, Army Watercraft

donald.c.overton.civ@mail.mil

(757)878-4751



Small Business Participation



Dee Klaft
Procurement Analyst
PM Transportation Systems
Business Office



Small Business Participation



Small Business Act:

“It is the declared policy of the Congress that the Government should aid, counsel, assist, and protect, insofar as is possible, the interests of small business concerns in order to preserve free competitive enterprise [and] to maintain and strengthen the overall economy of the Nation.”

“It is the policy of the United States that small business concerns [of every socioeconomic category] shall have the maximum practicable opportunity to participate in the performance of contracts let by any Federal agency, including contracts and subcontracts for subsystems, assemblies, components, and related services for major systems.”



Small Business Participation



- Use of Small Businesses (SB) helps the Government meet it's SB Goals and helps Industry maintain a robust supply base
 - **Subcontracting**: Encouraging the maximum participation of Small Business subcontractors in major prime contracts
 - **Teambuilding**: Facilitating opportunities for small businesses to network and partner with one another and with large prime contractors
 - **Small Business Outreach**: Improving connections between prospective Small Business sources and the acquisition community

- The Government welcomes feedback regarding how SB participation could be maximized

- Industry feedback/ideas will be considered for SB requirement in any RFP



Small Business Participation



TACOM LCMC's Small Business Website: <http://contracting.tacom.army.mil/sbo/sbo.htm>

- Provides comprehensive guidance on all aspects of doing business with TACOM LCMC
- Event notices and other announcements
 - Prime contractor lists and contact information
 - Provides a master list of available subcontractors, with instructions on how to get on it

What a TACOM LCMC Small Business Specialist **can do** for a small business owner or representative:

Discuss how the business's capabilities match TACOM LCMC's and other agency's opportunities

- Suggest avenues to pursue, tailored to the company's specific product or service line
- Record the small business as a prospective contracting source
- Be available for follow-up questions

What a Small Business Specialist **cannot do**:

- *Act on direct behalf of a small business in the manner of an agent*
- Discuss active procurement actions (the responsibility of the Contracting Officer)



Small Business Participation



TACOM LCMC's Office of Small Business Programs Points of Contact:

Email: usarmy.detroit.tacom.mbx.lcmc-osbp@mail.mil

Marie Gapinski	Associate Director	586-282-6005
Ron Fiorani	Small Business Specialist	586-282-1021
Linda Ballard	Small Business Specialist	586-282-1024
Silvia Owens	Small Business Specialist	586-282-1023
Nancy Lang	Small Business Specialist	586-282-1028
Michael Bradley	Small Business Specialist	586-282-1021
Colleen Hirsch	Small Business Specialist	586-282-1027
Karen Maluchnik	Admin. Asst. Specialist	586-282-5388



Communication Process



Procurement Website: <http://contracting.tacom.army.mil/opportunity.htm>

- Provides planning information and announcements
- Interested parties are responsible for monitoring updates

It is the responsibility of Industry to check the website regularly!

*All communications shall be through the Army Watercraft Systems Mailbox:
usarmy.detroit.peo-cs-css.mbx.pm-ts-aws@mail.mil*



Government Responses to Questions

