



Littoral OpTech West Workshop

23-24 Sep 2014

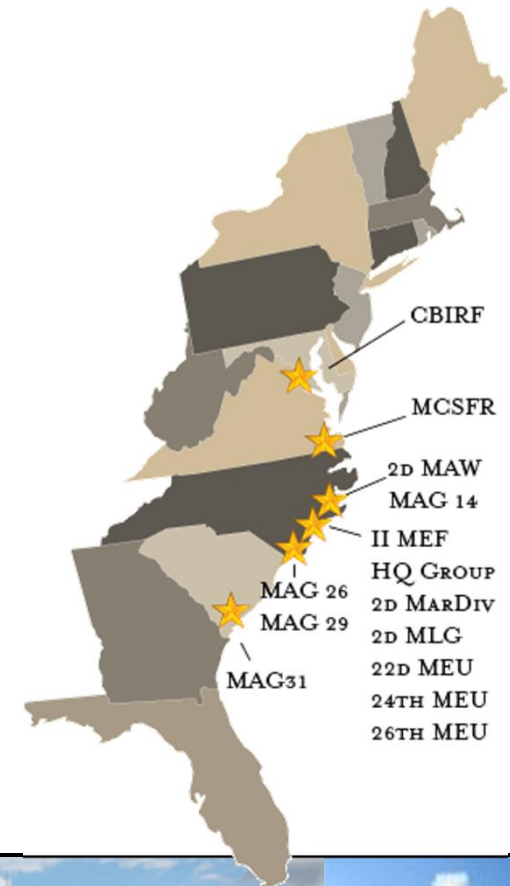
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II Marine Expeditionary Force

- II Marine Expeditionary Force (MEF) is one of three MEFs in the Marine Corps. I MEF is in California and III MEF is in Okinawa
- A MEF is a combined arms force consisting of ground, air and logistics forces. It possesses the capability for projecting offensive combat power ashore while sustaining itself in combat without external assistance for a period of 60 days.
- II MEF is comprised of more than 50,000 Marines and sailors.

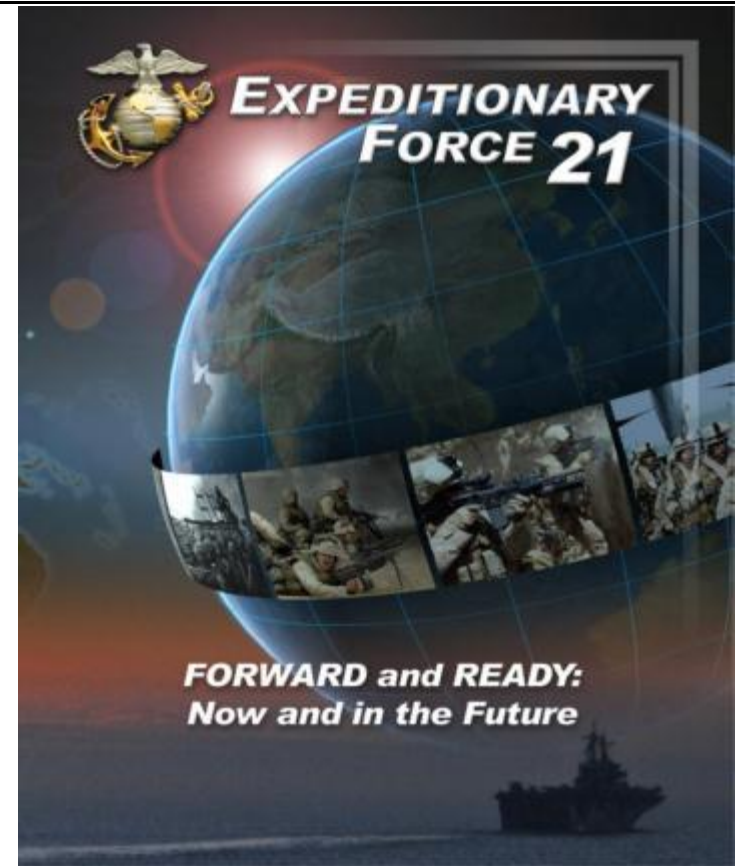
II MEF Components

- 2nd Marine Division ground combat element
- 2nd Marine Aircraft Wing aviation combat element
- 2nd Marine Logistics Group combat service support element
- Chemical Biological Incident Response Force (CBIRF)
- Marine Corps Security Force Regiment (MCSFR)
- II MEF Headquarters Group
- 22 Marine Expeditionary Unit (MEU), 24 MEU, 26 MEU
- 2d Marine Expeditionary Brigade



Expeditionary Force 21

- Expeditionary Force 21 is the Marine Corps vision for designing and developing the force that will continue to fulfill its future responsibilities.
- It is an actionable plan and a disciplined process to shape and guide our capability and capacity decisions while respecting our country's very real need to regain budgetary discipline.
- Nimble by organizational design and adaptive by culture, we will rely on open-mindedness and creativity and make the best of what we have.
- Through Expeditionary Force 21 we will chart a course over the next 10 years to field a Marine Corps that will be: ***the right force in the right place at the right time.***



8 Attributes of Expeditionary Force 21

- Expeditionary Force In “Readiness”
 - 1/3 of operating forces deployed forward for deterrence and proximity to crises
 - Self-sustaining under austere conditions
- Middleweight Force
 - Light enough for rapid response
 - Heavy enough to prevail in the littorals
- Modern Force
 - Preserves quantitative edge over opponents
 - Exploits innovative concepts and approaches
- Integrated Combined Arms Force
 - Applies all aspects of joint combat power
 - Extends power of naval forces
- Integrated Naval Force
 - Command and control exploits the sea as maneuver space
 - Leverages traditional and innovative operating concepts
- Force Biased for Action
 - Poised for rapid crisis response; no tiered readiness
 - Readily Deployable-Employable-Sustainable forces
- Leading Edge of Joint Force
 - Regionally oriented MEFs and MEBs
 - Small fly-in command element capable of transitioning to a joint warfighting headquarters
- Forcible Entry In Depth
 - Scalable to crisis, contingency or forcible entry
 - Capable of projecting two MEBs from the sea - Seizes and holds for follow-on joint forces

Operating from the SeaBase

SEABASING CAPABILITY



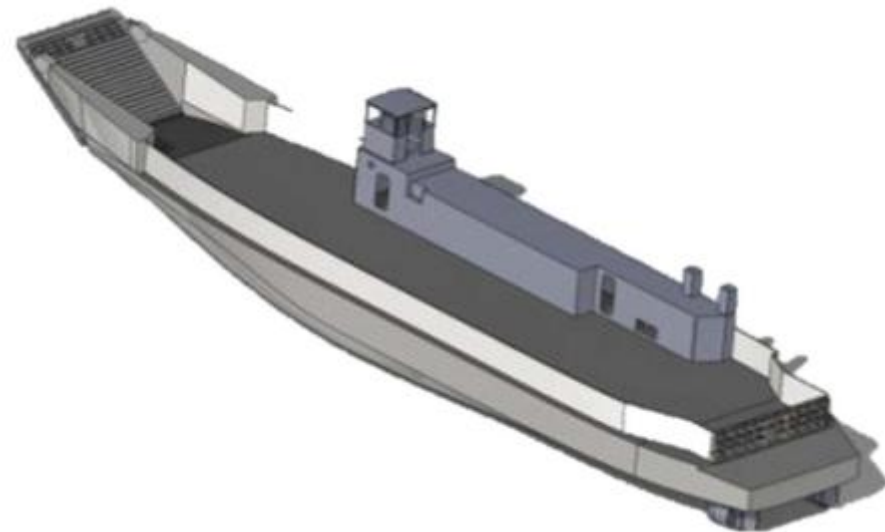
Connectors

- Current Connectors
 - Landing Craft Air Cushion (LCAC)
 - Landing Craft Utility (LCU)
 - Joint High Speed Vessel (JHSV)
- Future capabilities
 - Increased range
 - Increased speed
 - Increased capacity
 - Increased protection
 - Increased flexibility



Connectors

- The Ship to Shore Connector (SSC) hovercraft program aims to build on USN LCAC experience to provide unparalleled transport options from ship to shore and beyond.
- Surface Connector(X)
Replacement SC(X)R
 - Replacement to LCU
 - Rugged and reliable
 - Ease of maintenance and repair
 - Fuel efficient with a high payload
 - Independent operations capable
 - No impact to infrastructure
 - Affordable!
- Connector after next??



Ultra Heavy-lift Amphibious Connector (UHAC)

- Current version is a half-scale prototype
 - Weighs 38 tons
 - 18 feet tall
- A full-scale UHAC
 - Transports up to three main battle tanks
 - 20 knot water speed
 - 200 mile range
 - Able to clear 3 meter obstacles and transit marsh and mud



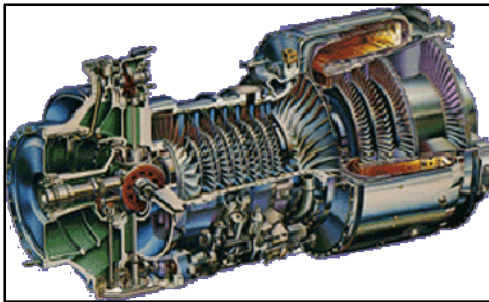
Amphibious Combat Vehicles

- Assault Amphibious Vehicle
 - Undergoing survivability/habitability upgrade
- Expeditionary Fighting Vehicle
 - Cancelled due technical and budget challenges
- Amphibious Combat Vehicle 1.1, 1.2, and 2.0
 - In development
- DARPA's Fast, Adaptable, Next-Generation (FANG) ground vehicle
 - Functional requirements intended to mirror the Marine Corps' Amphibious Combat Vehicle



ACV Technology Challenges

- Propulsion/Power
 - Achieving high water speed
 - Standard or Turbine
- Armor
 - Protecting occupants while reducing weight
- Protection
 - Defend the ACV from threats during water transit to include anti-ship missiles
- **Budget**





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