



Expeditionary Strike Group: Command Structure Design Support

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Introduction



- CNO's Global Concept of Operations requires a restructured Fleet
- Switch from today's 12 CVBGs to:
 - 12 Carrier Strike Groups (CSGs), 12 Expeditionary Strike Groups (ESGs), multiple Surface Action Groups (SAGs), and guided missile submarines
 - Operate independently to counter transnational threats and join together to form ESForces — the "gold standard" of naval power
 - Dispersed, netted, and operationally agile fleet, operating as part of the Joint Force to conduct a variety of missions

Global Concept of Operations

Designed to increase striking power, enhance flexibility, and provide more flexible, robust, and distributed offensive combat capability by transforming Amphibious Readiness Group/ Marine Expeditionary Unit (Special Operations Capable) ARG/MEUs into ESGs.



What is an Expeditionary Strike Group?



- Transform a previously vulnerable, yet highly valuable, asset into a more combat credible force package: ISR, Strike/NFS, AW, ASW/SW, MIO, TBMD
- Combination of three Cruiser-Destroyer ships, a submarine, and a ARG/MEU(SOC) to form an ESG increases offensive/defensive capabilities
 - (1) Power projection
 - (2) Maritime superiority for air, surface and subsurface
 - (3) Maritime special operations
 - (4) Amphibious operations
 - (5) Military operations other than war
 - (6) Enabling operations
 - (7) Supporting operations
 - (8) Serving as a Joint Task Force enabler
- Advantages offered by ESGs include better distribution of global power, enhanced combat capability, and improved technologies and efficiencies for conducting the GWOT



A Busy Week in the Gulf









Commands and Ships that Deployed with ESG-1

COMMANDS	SHIPS
COMEXSTRIKGRU One	USS Peleliu
13 th MEU(SOC)	USS Ogden
COMPHIBRON Three	USS Germantown
TACRON-11 Detachment 4	USS Port Royal
BMU-1 Detachment C	USS Decatur
ACU-5 Detachment C	USS Jarret
ACU-1 Detachment E	USS Greenville
EODMU-3 Detachment	
Fleet Surgical Team 5	
Fleet Info Warfare Center Detachment	
HC-11 Detachment 9	
HSL-37 Detachment 1	
HSL-49 Detachment 3	



ESG Missions



ESG can be used to support a combatant commander in larger contingencies as part of an ESF or it can provide the core capability to form a Joint Task Force for smaller, operational-level missions.
 Eight core capabilities are provided by ESGs: Power projection, maritime superiority (air, surface, and subsurface), maritime special operations, amphibious operations, military operations other than war, enabling operations, supporting operations, and Joint Task Force (JTF) enabler.

Current ESG-1's mission is to, "provide the Combatant Commander or Fleet Commander a versatile sea-based operational force that can be tailored to a variety of missions, including quick reaction crisis response options in maritime, littoral, and inland environs in support of U.S. Policy. The ESG is capable of executing all ARG/MEU(SOC) missions and additional offensive and defensive operations in a limited non-permissive environment." (EWTGPAC, 2005)



Integrated Mission Essential Tasks Conducted by an Expeditionary Strike Group



Both USN and USMC	
Conduct Intelligenæ, Surveillanæ and	Conduct Amphibious Assault
Reconnaissance	
Conduct Information Operations/ Warfare	Conduct Amphibious Withdrawal
Tactical Deception Operations	Conduct Amphibious Demonstration
Provide Operational Fires (Joint/Coalition)	Conduct NEO
Provide Anti-Terrorism/ Force Protection	Conduct Humanitarian/ Disaster Assist
Conduct Terminal Guidance Operations	Conduct Peace Operations
Conduct MIO/ EMIO Operations	Conduct Deliberate Planning
Conduct ESG Force Defense	Provide Contingency Support Packages (TRAP,
(AD/USW/SUW/DAF)	CASEVAC, QRF, MASS, CASUALTY)
Conduct VBSS (compliant/ non-compliant)	USMC Specific
Conduct VBSS (compliant/ non-compliant) Conduct Sustainment Operations	USMC Specific Conduct Amphibious Raid
Conduct VBSS (compliant/ non-compliant) Conduct Sustainment Operations Provide Command, Control, Communications	USMC Specific Conduct Amphibious Raid Conduct Direct Action Operations
Conduct VBSS (compliant/ non-compliant) Conduct Sustainment Operations Provide Command, Control, Communications and Computers	USMC Specific Conduct Amphibious Raid Conduct Direct Action Operations (Precision Raid or VBSS)
Conduct VBSS (compliant/non-compliant) Conduct Sustainment Operations Provide Command, Control, Communications and Computers Conduct Initial Terminal Guidance Operations	USMC Specific Conduct Amphibious Raid Conduct Direct Action Operations (Precision Raid or VBSS) Conduct Airfield/ Port Seizure
Conduct VBSS (compliant/ non-compliant) Conduct Sustainment Operations Provide Command, Control, Communications and Computers Conduct Initial Terminal Guidance Operations USN Specific	USMC Specific Conduct Amphibious Raid Conduct Direct Action Operations (Precision Raid or VBSS) Conduct Airfield/ Port Seizure Conduct Security Operations
Conduct VBSS (compliant/ non-compliant) Conduct Sustainment Operations Provide Command, Control, Communications and Computers Conduct Initial Terminal Guidance Operations USN Specific Provide Theatre Missile Defense Warning	USMC Specific Conduct Amphibious Raid Conduct Direct Action Operations (Precision Raid or VBSS) Conduct Airfield/ Port Seizure Conduct Security Operations Conduct Limited Expeditionary Airfield QoÕs
Conduct VBSS (compliant/non-compliant) Conduct Sustainment Operations Provide Command, Control, Communications and Computers Conduct Initial Terminal Guidance Operations USN Specific Provide Theatre Missile Defense Warning Provide Sea Lines of Communications Protection	USMC Specific Conduct Amphibious Raid Conduct Direct Action Operations (Precision Raid or VBSS) Conduct Airfield/ Port Seizure Conduct Security Operations Conduct Limited Expeditionary Airfield QoÕs Employ Non-Lethal Weapons
Conduct VBSS (compliant/ non-compliant) Conduct Sustainment Operations Provide Command, Control, Communications and Computers Conduct Initial Terminal Guidance Operations USN Specific Provide Theatre Missile Defense Warning Provide Sea Lines of Communications Protection Provide Sanctions Enforcement	USMC Specific Conduct Amphibious Raid Conduct Direct Action Operations (Precision Raid or VBSS) Conduct Airfield/ Port Seizure Conduct Security Operations Conduct Limited Expeditionary Airfield QDOS Employ Non-Lethal Weapons Conduct Enhanced Urban Operations



MARINE EXPEDITIONARY UNIT (MEU) CAPABILITIES

Amphibious Operations

Amphibious Assault

Amphibious Raid

Amphibious Demonstration

Amphibious Withdrawal

Direct Action Operations

Seizure/Recovery of Offshore Energy Facilities

Visit, Board, Search and Seizure Operations (VBSS)

Specialized Demolition Operations

Tactical Recovery of Aircraft and Personnel (TRAP)

Seizure/Recovery of Selected Personnel or Material

Counter-proliferation of Weapons of Mass Destruction

Military Operations Other Than War (MOOTW)

Peace Operations

- Peacekeeping

- Peace Enforcement

Security Operations

Noncombatant Evacuation Operations (NEO)

Reinforcement Operations

Joint/Combined Training/ Instruction Team

Humanitarian Assistance / Disaster Relief

Supporting Operations

Tactical Deception Operations

Fire Support Planning, Coordination and Control in a Joint/ Combined Environment Signal Intelligence/ Electroni c Warfare

Military Operations in Urban Terrain

Reconnaissance and Surveillance

Initial Terminal Guidan ce

Counterintelligence Ope rations

Airfield/ Port Seizure

Limited Expeditionary Airfield Op erations

Show of Force Operations

Joint Task Force Enabling Operations

Shipping Operations





"Plug and Play"



- ESG-1 must be able to work smoothly while planning and conducting these missions in several contexts
- > Two issues are of particular interest to this study
 - 1) ESG-1 as a "unit of force" under a senior Naval Commander such as a Joint Force Maritime Component Commander (JFMCC), Fleet commander, or Amphibious Force Commander requiring coordination with N-staff/CWC Doctrine and possibly Joint Amphibious Doctrine.
 - 2) As part of a Joint Force, working directly for the Joint Force CDR
 - Range from a small JTF with its own AOR to a context that requires sig'ly more coordination w/ the JFACC, JFLCC, JFMCC, and JSOTF
 - In this case Joint Doctrine is applicable, including Joint Amphibious Doctrine
 - C2 agencies with which the ESG will need to interoperate, and their underlying doctrine will change. For example, coalition ships may join the ESG for various missions.

Dispersed Ops and Attachments raises question whether a CWC org is best

 CWC requires close proximity of all warfare commanders for planning, asset apportionment, and task execution. ESG-1 can anticipate detaching assets to support other commanders and assuming control of additional assets from coalition partners, Coast Guard, Navy, etc.



Adaptive Architectures for Command and Control (A2C2)



- Early research Chief of Naval Operations (CNO) Strategic Studies Group (SSG) XVIII to help define adaptive command structures for what will become Sea Power XXI.
- Commander Carrier Group One (COMCARGRUONE), ADM Polatty's staff, to conduct a one-week experiment with model-driven alternative command structures in preparation for Global Wargame 1999.
- 2001, conducted a series of quantitative modeling and simulation analyses to support the SSG XXI Cognitive Concept Generation Team. Goal was to align Navy's tactical C2 organization/ processes w/ the FORCEnet concept. Results: Superiority of FORCEnet structures over CWC structures for future missions. Modeling and simulation results indicate that the FORCEnet C2 organizational structure has potential to increase speed of command (over today's CWC structure) through more efficient use of resources, and, through increased collaboration, to improve the warfighter's shared awareness of the situation and of the roles, responsibilities, and actions of other warfighters.
 - ✓ FORCEnet structure will be more adaptable, thus better able to maintain performance as the situation and/or mission changes.



ESG-1/ A2C2 Research Objectives



- Model current organizational architecture and C2 processes of ESG-1 and identify possible deficiencies and performance problems that are due to structural, organizational and behavioral causes
- Three levels of analysis could be performed include: assessment, comparison, and optimization analysis of the current ESG structure with a scenario across a range of measures of performance.
 - <u>Assessment</u>: Diagnosis of problematic areas and suggestions for potential organizational remedies
 - <u>Comparison</u>: Comparative modeling of current structure vs. alternative structures (alternative operational architectures) and a quantitative assessment of performance pay-offs
 - Optimization: Quantitative assessment of performance pay-offs of an optimization-based design and simulation of alternative architectures



ESG Research Issues



Can the ESG-1 make the most efficient and effective use of its assets to address the varying mix of missions across these two organizational contexts while using a CWC (or current?) structure? [Note: The C2 architecture includes ESG staff structure and doctrine, ESG organization structure/ doctrine, and ESG C2 processes.]

Related questions include --

What are the structural and process inhibitors of efficient/ effective:

- Use of assets?
- Coordination with MEU and use of MEU assets?
- Use of externals (e.g., coalition, attached units, reach back, and requests/ planning)?
- Asset allocation process?



ESG Research Issues (cont'd)



Flag Officer/General Officer

- Traditional ARG/MEU(SOC) deploys with two, co-equal 06 CDRs, CO of the MEU(SOC) and CO of the amphibious squadron
- Supported/supporting doctrine in Joint Doctrine for Amphib Ops
 - Higher authority may designate, or CPR and CO MEU will mutually agree upon the supported commander
 - Command model adopted by ESG-2
- ESG-1 operated under a flag officer: Separate staff, and the CDR, ESG-1 functioned as the officer in tactical command (OTC)
- Advantages of Flag-led ESG:
 - Provides Coalition Force Maritime Component Commander a more experienced and senior Staff afloat
 - Bridges the operational and tactical levels and avoids task saturation at the CTG level
 - More effective when coordinating with Flag-led coalition Units
 - Achieves parity with a Carrier Strike Group signif advantage once in theater and for procuring resources during work ups
 - Essential for conducting Regional Engagements, particularly in the CENTCOM area of operations



Doctrine



- ESG currently uses a mixture of doctrines, combining Composite Warfare Commander (CWC) doctrine and the supported/supporting relationship from Amphibious doctrine.
 - Surface Combat Commander (SCC) required to operate under two different sets of doctrine
 - SCC node can become extremely busy and requirement for the OTC to manage two org'l structures adds to an already high workload
- Under CWC doctrine the SCC has authority for the apportionment of assets
 - When managing MEU assets, supported/supporting relationship is the prevailing doctrine and represents very different way of apportioning assets
- Issues that arise when employing a combined set of doctrine
 - Who is the supported commander and who is the supporting for different situations?
- CWC doctrine is geared more for open ocean operations; Strike capability was added later where the Navy version of strike was conducted by carrier aircraft. Because Naval strike and amphibious strike involve different aspects, it can be confusing to have a "Strike Commander."





Proposed Command and Control Structure for ESG-1





The CWC-like Relationships in ESG-1



- Expertise, staff size and capability, conflict resolution authority need be taken into account
 - Role of Strike Commander may not be allocated to the MEU CDR, but is retained by CESG-1
 - Advantages include the ability to better coordinate Navy strike with MEU ground strike (providing unity of command), keeping a focal point for resolving competing demands from other WCs for ACE air assets, and removing/reducing oper'l constraints on MEU assets
 - Controversial as the battalion landing team is major strike force in ESG, and primary mission for ACE is to support Marines on the ground.
 - Previous ESG deployments, upon entering theater and becoming a unit of force under a JTF or a FLT CDR, Marines were often detached ashore (sometimes with only a part of their ACE), or part of the ACE (e.g., the AV8Bs) were sent off (i.e., tactical control (TACON) was transferred) to regional commander for assignment elsewhere. It is felt that the flexibility to deal with such external demands on MEU strike assets is best left to the CESG and his N-staff.