FORCE DESIGN

A SNAPSHOT

The Path to Force Design

After nearly a decade and a half of continuous combat operations in the Middle East, General James Amos published Expeditionary Force 2021, in 2014. The new trajectory of the service was to reemphasize the Marine Corps' U.S. Code 8063, Title 10, responsibilities to be prepared for service with the fleet in the seizure and defense of advanced naval bases. The document highlighted the increasing likelihood of littoral operations, citing factors such as conflicting sea claims, growing naval competition, and the rise of land-based threats. Additionally, it acknowledged the added challenges posed by modern sensors and weapons. EF21 emphasized the importance of establishing advanced bases to achieve air and maritime superiority.

Two years later, General Robert Neller built upon EF21 with the Marine Corps Operating Concept (MOC). A problem identified in the MOC was the Marine Corps' inability to adapt at the required rate to meet the challenges of a future operating environment marked by complex terrain, technology proliferation, information warfare, signature shielding and exploitation, and a non-permissive maritime domain. The MOC served as the starting point to address this problem by reaffirming the importance of maneuver warfare and combined arms for the 21st century and outlining critical tasks for developing the future force.

Most recently in 2019, General David Berger published Force Design 2030. This document laid the framework for how the Marine Corps would modernize and experiment to better fight a peer adversary on the modern battlefield. Force Design also emphasized a reorientation to amphibious warfare. The strategy-driven aspect aligns with the National Defense Strategy's emphasis on modernization and increased lethality across services in the face of eroding military superiority. Moreover, by embracing an integrated deterrence approach, and fostering interoperability with Allies and partners, the Marine Corps is strategically positioned to counter emerging threats. The Marine Corps approach to Force Design reflects a comprehensive and iterative change, ensuring the Marine Corps remains agile, technologically advanced, and strategically aligned for the challenges of tomorrow's battlefield.

Since its inception in 1775, the Marine Corps has continuously evolved to meet the ever-changing demands of the battlefield. The Marine Corps of today is not the same as the Marine Corps in 1994, and the Marine Corps of 1994, was not the same one as the Marine Corps of 1934. As the battlefield evolves, so too does the Corps.

50's to 80's PARADIGM SHIFT:

Fleet Marine Force construct endures.

Published Landing Force Bulletin 17 on Amphibious Vehicle Envelopment.

Force development focused on vertical envelopment, MAGTF integration, cold weather amphibious operations on NATO's northern flank, and maritime prepositioning.

1950 **1970**

Cold War

Cold War:
Evolve into a naval force capable of supporting a joint campaign that was continental in character.

Photo by Cpl. Ethan R. Jones / USMC

The Mission

Title 10 U.S. Code, Chapter 807, Section 8063

“The Marine Corps shall be organized, trained, and equipped to provide fleet marine forces of combined arms, together with supporting air components, for service with the fleet in the seizure or defense of advanced naval bases and for the conduct of such land operations as may be essential to the prosecution of a naval campaign.

In addition, the Marine Corps shall provide detachments and organizations for service on armed vessels of the Navy, shall provide security detachments for the protection of naval property at naval stations and bases, and shall perform such other duties as the President may direct. However, these additional duties may not detract from or interfere with the operations for which the Marine Corps is primarily organized.”

The Nation’s shock troops must be the most ready when the Nation is least ready. -82nd and 114th Congresses on the role of the U.S. Marine Corps. We are the fight now force.

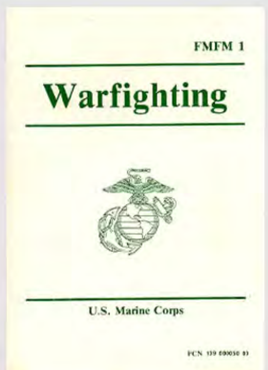
90’s to 2015 PARADIGM SHIFT:

Publication on FMFM 1 Warfighting (1989)

FMF conducted sea-based crisis response at double the Cold War crisis rate

FM 3-24 Insurgencies and Countering Insurgencies

Force development focused on power projection to deal with episodic, rapidly emerging crises and countering insurgencies



2015 - EMERGING PARADIGM:

Published Naval concepts (Littoral Operations in a Contested Environment, Distributed Maritime Operations)

Published TM EABO and Stand-in Forces

Force development focused on littoral maneuver and sustainment, maritime reconnaissance, long range precision fires, and operations in the information environment.

1990 2010 2030-

Sole Superpower

Sole Superpower:
No clear pacing threats. Enjoyed the luxury of presumptive air, maritime, and information superiority.

Rise of Peer Pacing Threats

Rise of Peer Pacing Threats:
Air, maritime, and information superiority cannot be assumed. Current capabilities insufficient relative to the threat.

Force Design
Process Map

A THREAT-INFORMED, CONCEPT-

STRATEGIC GUIDANCE

2021

- TRI-SERVICE MARITIME STRATEGY
- INTERIM NSS
- DPG 2021

2022

- SECNAV POM-24
- NDS 2022

THREAT ANALYSIS

CHINA / RUSSIA

CONCEPTS

- JOINT WARFIGHTING CONCEPT
- STAND-IN FORCES
- RECON / COUNTER-RECON
- TALENT MANAGEMENT 2030
- TRAINING & EDUCATION 2030

STUDIES & ANALYSIS

- •JFOS 2.1 CAMPAIGN ANALYSIS
- •III MEF FD IMPACT
- •FORCE VULNERABILITY ASSESSMENT
- •LOGISTICS C2
- •C2 ENABLERS
- •FORWARD ENGAGEMENT CONCEPT 2.0

- •JFOS 2.2040 CAMPAIGN ANALYSIS
- •II MEF IAMD
- •AMPHIB FLEET
- •SURFACE MOVEMENT CAPABILITIES
- •FORWARD ENGAGEMENT CONCEPT 3.0
- •ARV MARITIME QUARTERBACKING
- •MAGTF FIRES
- •FUTURE INF BN TRNG
- •MUX FoUAS PT. 2

WARGAMING

- •PROVIDENT FORGE
- •OIE
- •III MEF
- •MLR SERIES
- •MEU SERIES
- •POM-24
- •LITTORAL MANEUVER
- •LITTORAL LOG
- •EW-21
- •ENIGMA SERIES
- •PACFLT 13
- •PACFLT 14
- •ENDER'S RISE

- •GLOBAL 21
- •THREAT TTX
- •AVIATION
- •OIE
- •EW-22 PT.1
- •EW-22 PT.2
- •GLOBAL 15
- •RXR
- •PACIFIC CASCADE
- •MLR SERIES
- •NSG-22

EXPERIMENTATION

- •LSE-21
- •TALISMAN SABER
- •PROJECT CONVERGENCE-21
- •IBX-30
- •MWX

- •RIMPAC-22
- •VALIANT SHIELD-22
- •PROJECT CONVERGENCE-22
- •IBX-30
- •STEEL KNIGHT-22
- •MWX
- •COLD RESPONSE
- •ARTIC EDGE-22

INTEGRATED PLANNING TEAMS

- **•ENTERPRISE LOGISTICS**
- **•ISR ENTERPRISE PT.1**
- **•MLR PT.2**
- **•C5ISRT / X-C5ISRT**
- **•MEU PT.2**
- **•RESERVE PT.2**
- **•INSTITUTIONAL SAP**
- **•INTEGRATED AIR & MISSILE DEFENSE**
- **•LITTORAL MANEUVER**
- **•SYNCHRONIZATION**

- •AVIATION PT.2
- •COMPONENCY
- •COMMUNICATIONS FORMATIONS
- •SERVICE RETAINED FORCES
- •NEF
- •ISR ENTERPRISE PT.2
- •ALL-DOMAIN C2
- •MCISRE PT. 2
- •SYNCHRONIZATION
- •GPN
- •sUAS
- •ENTERPRISE LOG PT. 2

CAMPAIGN OF POMS

POM-23
MATURING KILL WEBS

POM-24
SET & SUSTAIN THE STAND-IN FORCE

-BASED, CAMPAIGN OF LEARNING

2019 - 2023
Studies:29
Wargames:41
Experiments:31
IPTs:45

2023

SECNAV POM-25

2024

SECNAV POM-26

CMC39 CPG

/ DPRK / IRAN / VEOS

&
N

I&L 2030

Distributed Maritime Logistics Operations

JOINT WARFIGHTING CONCEPT 3.0

21ST CENTURY AMPHIB OPS

HOW WE FIGHT

- ORGANIC PRECISION FIRES
- AoA OPERATIONAL SUSTAINABILITY
- NCIP-MC23

- NCIP-MC24
- MODERNIZING MEDICAL SERVICES
- MMRC CAPABILITIES ALTERNATIVES ANALYSIS
- ARV Co COMM ASSESSMENT
- CONTESTED LOG PORTFOLIO
- TACTICAL MULTI-DOMAIN SENSORS IN LITTORALS
- FUTURE AMPHIB FORCE CBA
- ARTY AMMO INVENTORY ON T&R
- SEA-BASED EXP FORCES
- COMPLEX TERRAIN IN FUTURE CONFLICTS

- INF BN SERIES
- MLR SERIES
- MLSG SERIES
- AZURE DRAGON
- RECON/XRECON
- COMPETITION WARGAME
- MULTI-DOMAIN C2

- 21 CAO
- MULTI-DOMAIN C2
- TRI-LATERAL
- MALTESE DRAGON II
- FUTURE STUDIES PROGRAM
- EXPEDITIONARY WARRIOR 24
- TACTICAL LOGISTICS

- FLEET BATTLE PROBLEM 23
- MLR SLTE
- BALAKATAN 23
- PARABELLUM HORIZON
- TOEE 23.1
- NORTHERN EDGE 23-1
- FPB-FFC 23.1
- NORTHERN EDGE 23-2
- LSE 23
- MFP IOC DEMO
- SK-23*
- BOLD QUEST 23
- IBX-30

- IBX V34
- PROJ CONVERGENCE C4
- VALIANT SHIELD 24
- RIMPAC 24
- GRAY FLAG 24

- SYNCHRONIZATION
- C2 FORMATIONS/MIG
- ENTERPRISE LOG PT 3
- AVIATION PT 3
- TOTAL FORCE STRUCTURE IPT

- COLAG
- MULTI-DOMAIN MOBILITY

POM-25
Quality of Life

POM-26
Postured in our Fighting Stance

Force Design
New or Emerging Capabilities

High Mobility Artillery Rocket System (HIMARS)
Is an indirect fire rocket/missile launcher and capable of firing all rockets and missiles of the current and future Multiple Launch Rocket System Family of Munitions. The HIMARS 24-hour ground-based, responsive indirect fires that can accurately engage targets at 60+ km with high volumes of fire under all weather conditions throughout all phases of combat operations ashore.

Amphibious Combat Vehicle (ACV)
The ACV family of vehicles provide general support lift to otherwise foot-mobile infantry formations. Ship-to-objective capable, the ACV offers greater protected mobility, improved lethality, and on-the-move networked command and control. The Marine Corps will field 257 ACVs by the end of the fiscal year filling 41% of the acquisition objective.

Marine Air Defense Integrated System (MADIS)
Employed on a pair of Joint Light Tactical Vehicles (JLTV), the MADIS can defend against Fixed and Rotary Wing aircraft, Unmanned Aircraft Systems (UAS) threats, within the system weapons engagement zone (WEZ), with non-lethal electromagnetic attack and lethal fires.

Light Marine Air Defense Integrated System (L-MADIS)
An internally transportable pair of Ultra-Light Tactical Vehicles (ULTV) capable of defeating Fixed and Rotary Wing aircraft and group 1-5 Unmanned Aircraft Systems (UAS), within the L-MADIS WEZ, via electromagnetic attack and Man Portable Air Defense Systems (MANPADs).

Medium Range Intercept Capability (MRIC)
MRIC defends forces against threat cruise missiles, Unmanned Aircraft Systems (UAS), and other aerial threats that enter its weapons engagement zone.

Ground/Air Task-Oriented Radar (G/ATOR)
Multi-role, ground-based, expeditionary three-dimensional radar system that provides surveillance of airborne targets, detection of cruise missiles, Unmanned Aircraft Systems, rockets, artillery, and mortars.

Navy Marine Expeditionary Ship Interdiction System (NMESIS)
NMESIS is a land-based weapon system designed to launch the Naval Strike Missile (NSM) in support of the Joint sea control effort.

Medium Landing Ship (LSM)

The LSM is a vessel purpose built to provide tactical maneuver and operational mobility for Marine forces conducting Expeditionary Advanced Based Operations to enhance the Joint Force's ability to carry out maritime campaigning in a 21st century threat environment.

Long Range Unmanned Surface Vessel (LRUSV)

The LRUSV is a semiautonomous vessel capable of extended travel and transporting loitering munitions that accurately track and destroy targets on sea or land. It will primarily serve as an intelligence, surveillance and reconnaissance platform.

Multi-Mission Reconnaissance Craft (MMRC)

The MMRC is a watercraft designed to insert and extract Marines, carry out reconnaissance, surveillance and target acquisition on the water to extend and fill gaps in sensor web coverage created by the complex terrain. MCWL is currently experimenting to learn best tactics, techniques and procedures to allow Marines to be prepared to fully utilize the MMRC when it comes online.

Advanced Reconnaissance Vehicle (ARV)

This is a purpose-built family of combat vehicles intended to provide Mobile Reconnaissance Battalions with greater sensor and communication capability while retaining the ability to fight for information. Capability dense, yet weight efficient, ARV is afloat ready, highly mobile on land and water, and capable of exercising persistent command and control of manned-unmanned teams.

Autonomous Low-Profile Vessel (ALPV)

The ALPV is an autonomous logistics delivery system that can be configured to deliver multiple variations of supplies and equipment throughout the littorals. This is one technology the Marine Corps is testing to provide sustainment to Stand-in Forces operating within contested areas, ensuring they are able to persist inside the reach of an adversary's weapons systems to distract and disrupt malign behavior before, during and after conflict.

Stern Landing Vessel

The vessel enables MCWL and the supported Marine Force and/or Marine Expeditionary Force to conduct experimentation across multiple domains, to include surface maneuver and mobility in support of Stand in Forces, as well as surface and subsurface (crewed and uncrewed) movement of ground equipment and cargo across the beach, and operation of uncrewed aviation platforms.

*Not to Scale

Force Design
Aviation Capabilities

F-35B Lightning II
The F-35 is a fifth-generation fighter jet with advanced stealth, agility and maneuverability, sensor and information fusion, and provides the pilot with real-time access to battle space information. It is designed to meet an advanced threat, while improving lethality, survivability, and supportability.

CH-53K King Stallion
The CH-53K is an optimized vertical, heavy lift, sea-based, long range solution for the naval force and immediately provides nearly three times the lift capability of the CH-53E, with the ability to transport one hundred percent of the vertical Marine Air-Ground Task Force (MAGTF).

XQ-58A Valkyrie
The Marine Corps XQ-58A Valkyrie is a newly acquired experimental aircraft. It provides the Marine Corps with a testbed platform for developing technologies and new concepts in support of the Marine Air Ground Task Force, such as autonomous flight and unmanned teaming with crewed aircraft. The XQ-58A has six planned test flights which will evaluate the effectiveness of autonomous electronic support to crewed platforms like the F-35B Lightning II.

MQ-9A Reaper
The MQ-9A is an extended range, medium altitude, long endurance remotely piloted aircraft capable of conducting multiple mission sets to include multi-sensor imagery reconnaissance, unmanned aerial escort, and electronic support. It can carry various payloads while integrating with command and control centers, allowing the synchronization of remotely piloted aircraft with ground and air assets.

Stalker Blk 30
Stalker is an operationally proven small, silent, Group 2 Unmanned Aerial System (UAS) that provides unprecedented long-endurance imaging capability in a variety of contested environments.

*Images Not to Scale

Tactical Resupply Vehicle-150

Also know as the Tactical Resupply Unmanned Aircraft System (TRUAS), this system is designed to provide rapid and assured, highly automated aerial distribution to small units operating in contested environments, enabling flexible and rapid emergency resupply, routine distribution, and a constant push and pull of material. The TRUAS is capable of carrying a payload of up to 150 pounds over 9 miles.

Medium Aerial Resupply Vehicle - Expeditionary Logistics (MARV-EL)

MARV-EL provides an autonomous operational level distribution platform for emergency resupply or sustainment when risk to manned air or ground systems is unacceptable, weather or environment precludes manned flight, or when ground transportation is slow, unavailable or unable to transit the terrain. MARV-EL has a threshold payload of 300lbs, objective 600lbs, with a threshold radius of 25 nautical miles and 100 nm objective.

V-BAT Unmanned Aerial System

The V-BAT unmanned aircraft system (UAS) is a rapidly deployable, expeditionary, vertical take-off and landing (VTOL) UAS that has demonstrated an ability to operate in a maritime environment with multiple deployments in support of Marine Expeditionary Units.

RQ-20B Puma

The Puma is a small, hand-launched system that provides enhanced land-based and maritime intelligence surveillance and reconnaissance and sensing capabilities for increased area awareness. The Puma has day and night vision and can scan an area 360 degrees using a lightweight, electro-optical and infrared camera located on the bottom of the device, with an operational altitude of 500 feet above sea level.

X2D

The Marine Corps' future operating concepts emphasize the need for agile, distributed operations which require small UAS to be organically owned and operated by tactical units for situational awareness, force protection, target engagement, persistent command, control, communications, and electronic warfare.

FORCE DESIGN
Logistics Modernization

I MEF MLG

- H&S BN
  - HQTRS CO
  - COMM CO
  - FDSVC CO
  - SVC
- CLR X7
  - HQTRS CO
  - CLB
  - CLB
  - CLB
- CLR X
  - HQTRS CO
  - DSB
  - ESB
  - CLB
  - CLB
  - CLB
  - CLB
- CRR
  - HQTRS CO
  - SUP CO
  - AMMO CO
  - MED LOG
  - MAINT BN
- MED BN
- DEN BN

II MEF MLG

- H&S BN
  - HQTRS CO
  - COMM CO
  - FDSVC CO
  - SVC
- CLR X7
  - HQTRS CO
  - CLB
  - CLB
  - CLB
- CLR X
  - HQTRS CO
  - DSB
  - ESB
  - CLB
  - CLB
  - CLB
  - CLB
- CRR
  - HQTRS CO
  - SUP CO
  - AMMO CO
  - MED LOG
  - MAINT BN
- MED BN
- DEN BN

III MEF MLG

- CLR X
  - HQTRS CO
  - LS
  - CLB
- CLR X7
  - HQTRS CO
  - FDSVC CO
  - SVC
  - COMM
- MAINT BN
- SUP BN
- ESB
- MED BN
- DEN BN

Other III MEF MSC Logistics Units

- 3D LLB (3D MLR) — CLB
- 12th LLB (12TH MLR) — CLB
- CLB 31 (31ST MEU) — CLB

Marine Littoral Regiment

Headquarters and Service Co

Communications Co

3x Rifle Co

1x General Support Co

1x Air Control Btry

1x Medium Missile Btry

2x Combat Logistics Co

1x GBAD Btry

The Combat Team conducts reconnaissance and counter-reconnaissance, employs and enables multi-domain fires, and establishes expeditionary sites in order to support the maritime campaign across the competition continuum.

The Logistics Battalion provides tactical logistics and EOD support in order to sustain regimental operations across the competition continuum.

The Anti-Air Battalion conducts anti-air warfare, and enables integration of aviation operations with organic and joint fires in order to support the maritime campaign across the competition continuum.

https://www.marines.mil/Force-Design/