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**Joint Forces Staff College
Joint Capabilities and Limitations
Handbook**

FOR INSTRUCTIONAL PURPOSES ONLY

**NATIONAL DEFENSE UNIVERSITY
JOINT FORCES STAFF COLLEGE
7800 HAMPTON BOULEVARD
NORFOLK, VIRGINIA 23511-1702**

JANUARY 2006

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CHAPTER 1

UNITED STATES ARMY

I. Vision and Mission

Vision. The Army Vision consists of three interdependent elements: people, readiness and transformation. People will remain the centerpiece of all that the Army does—Soldiers, civilians, retirees and veterans. Nonnegotiable readiness, the foundation of our contract with the American people to fight and win the Nation’s war, hinges on the well being of our people. Transformation, a process, defines how we change the way we think and fight in order to develop the capabilities required in the 21st century.

Mission. The Army’s mission is to fight and win our Nation’s wars by providing prompt, sustained land dominance across the full range of military operations and spectrum of conflict in support of combatant commanders. We do this by:

- Executing Title 10 and Title 32 United States Code directives, to include organizing, equipping, and training forces for the conduct of prompt and sustained combat operations on land.
- Accomplishing missions assigned by the President, Secretary of Defense and combatant commanders, and transforming for the future.

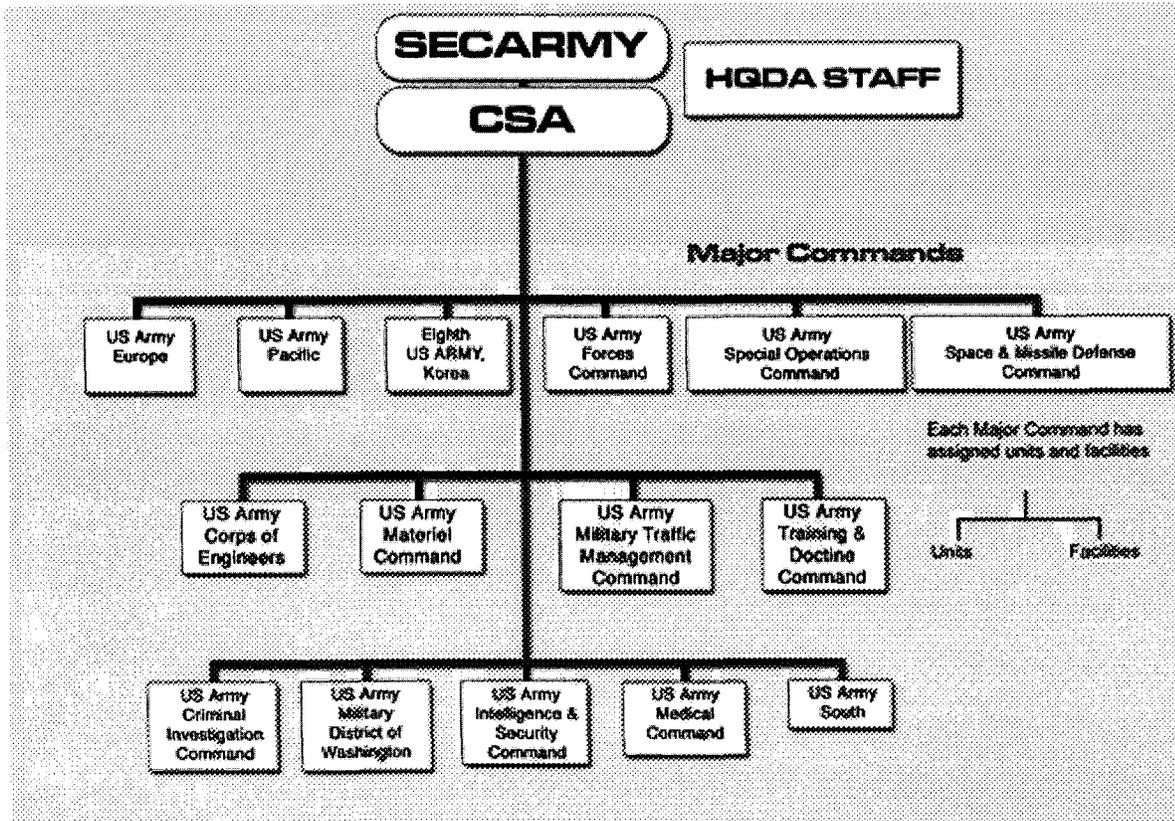
II. Organization

The Army, as one of the three military departments (Army, Navy and Air Force) reporting to the Department of Defense, is composed of two distinct and equally important parts: the active component and reserve components. The reserve components are the United States Army Reserve and the Army National Guard.

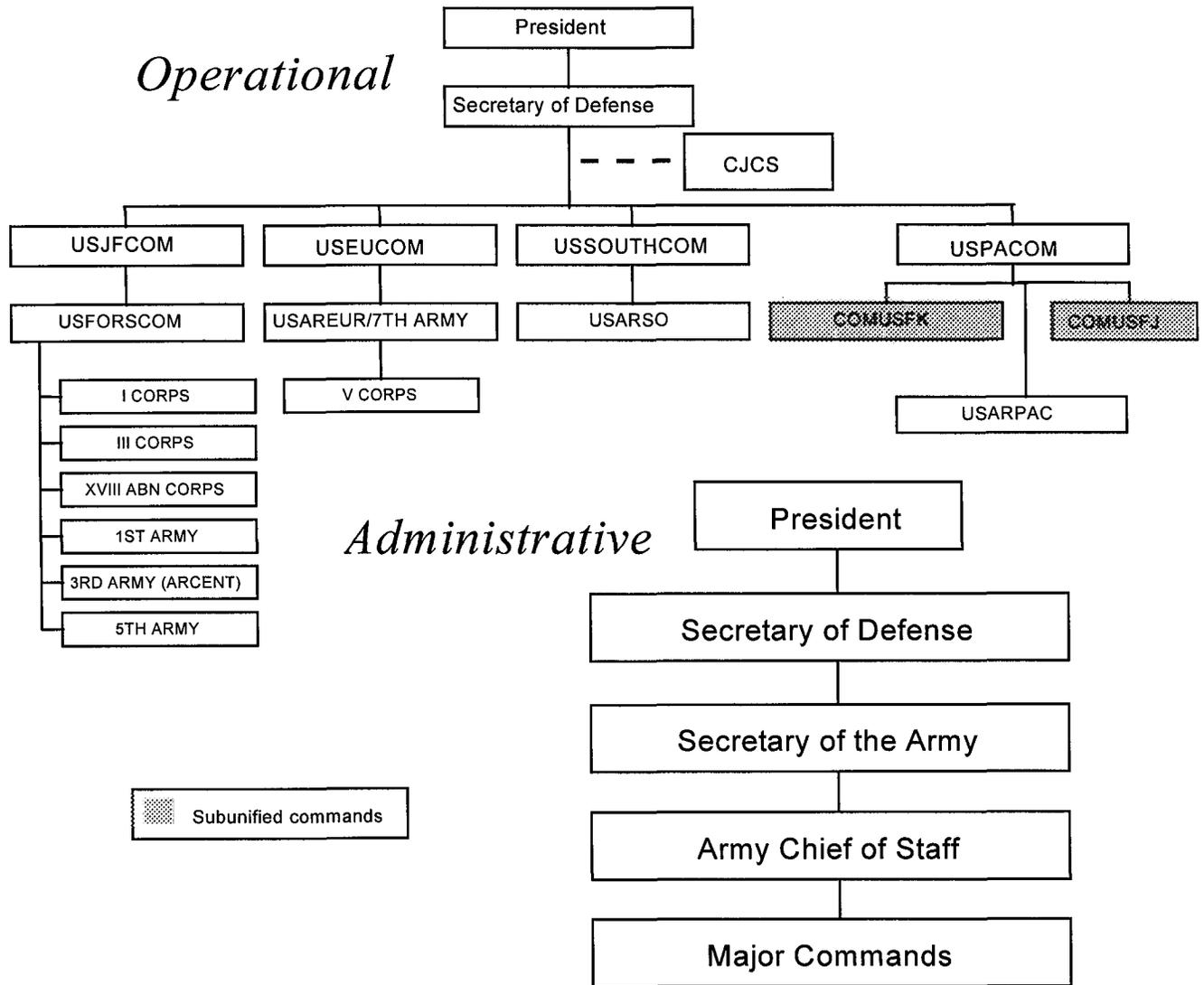
Regardless of component, the Army conducts both operational and institutional missions. The operational Army consists of numbered armies, corps, divisions, brigades, and battalions that conduct full spectrum operations. The institutional Army supports the operational Army through institutional organizations providing infrastructure required to raise, train, equip, deploy, and ensure readiness of all Army forces. The training base provides military skills and professional education to every soldier—as well as members of sister services and allied forces. The structure of the training base allows the Army to expand rapidly in time of war. The industrial base provides world-class equipment and logistics for The Army. Army installations provide the power-projection platforms required to deploy land forces promptly to support combatant commanders. Once those forces deploy, the institutional Army provides the logistics required to support them.

Without the institutional Army, the operational Army cannot function. Without the operational Army, the institutional Army has no purpose.

Depicted below is the organization of the U.S. Army. Units, installations and facilities within the Army are the responsibility of an Army Major Command (MACOM).



The chart below depicts the relationship between the President and the Army for operational and administrative actions.



A. Army Major Commands

Army Corps of Engineers: This command has two major missions, one military and the other civil. Its military missions are to manage and execute engineering, construction, and real estate programs for the US Army, Air Force and other federal agencies and foreign governments as assigned; to supervise research and development in support of these programs; to manage and execute Army installation support programs; to develop and maintain the capability to mobilize in response to national security emergencies, domestic emergencies, and emergency water planning programs; and to support the Army space initiatives. Its primary civil mission is to develop and maintain the nation's water and all related environmental resources, most notably for flood control, shore and beach restoration and fish and wildlife conservation.

Army Materiel Command (AMC): The principle Army wholesale logistics command. AMC is responsible for the acquisition of material, including research, development, configuration management, product assurance, and test and evaluation; and for supporting the readiness of that material (maintenance, packaging, integrated logistics support, storage, and disposal) assigned to the U.S. Army.

Army Test and Evaluation Command: ATEC plans, conducts and integrates developmental testing, independent, operational testing, independent evaluations, assessments, and experiments in order to provide essential information to decision makers.

Criminal Investigation Command (CIDC): CIDC investigations focus on crimes committed by military members and civilians whenever there is an Army interest in such investigations.

Intelligence and Security Command (INSCOM): Primarily responsible for the support of military power projection during contingency operations by providing personnel and tactically sustainable deployment packages in support of warfighters worldwide.

Medical Command (MEDCOM): The Medical command is responsible for providing the vision, direction and long-range planning for the Army Medical Department (AMEDD); for developing and integrating doctrine, training, leader development, organization, and material for the Army health service; and for allocating medical resources, analyzing utilization and assessing performance worldwide.

Military District Washington (MDW): The United States Army Military District of Washington is a unique Army command with a threefold mission: to respond to crisis, disaster, or security requirements in the National Capital Region; to provide base operations support for Army and Department of Defense organizations located in the NCR; and to conduct official ceremonies, locally and worldwide, on behalf of the nation's civilian and military leaders.

Space and Missile Defense Command: Serves as the Army's proponent for Space and National Missile Defense, and as the Army integrator for Theater Missile Defense. The command ensures that Army warfighters have access to space assets and products to win

decisively with minimum casualties – and effective missile defense to protect our nation as well as our deployed forces and those of our friends and allies.

Surface Distribution and Deployment Command (SDDC) (formerly MTMC): SDDC is the Army component command for the US Transportation Command and is the DOD single point manager for military traffic land transportation, DOD common user control, and supervision of all functions incident to the procurement and use of freight and all CONUS passenger transportation services.

Training and Doctrine Command (TRADOC): The Army's principle developer, conductor, guide, coordinator and integrator of the Army's total combat development effort. TRADOC also develops doctrine, and maintains and operates the training system.

Army component commands that are also MACOMs include:

United States Forces Command (FORSCOM)
US Army Pacific (USARPAC)
US Army Europe (USAREUR)
US Army South (USARSO)
US Army Special Operations Command (USASOC)

Army component commands that are not MACOMs include:

Army component of US Forces Korea (USFK)
Army component of US Forces Japan (USFJ)

B. Army Component Command Mission and Organization

Army Service Component Command (ASCC) (Formerly known as Theater Army): The Army Service Component Command is the Army component of a unified command and has responsibilities for Service specific activities within an AOR. The ASCC commander is responsible for preparing, training, equipping, administering, and providing Combat Service Support (CSS) to Army forces assigned to unified commands. The ASCC serves as the principal advisor to the Combatant Commander for support and employment of Army Forces (ARFORs) in theater and forces outside the theater tasked to support theater operations. The organizational structure is tailored to meet theater requirements. [NOTE: The term ARFOR is now used to encompass the many organizational structures and entities that formerly existed between Corps and Theater Army organizations, usually identified as “Echelons Above Corps” (EAC). Two formal structures that existed in this area are Army Group and Field Army.

The ASCC has a number of capabilities and options for organization and provides the capabilities that support a force-projection concept--from an austere to a fully developed theater. The ASCC structure represents capabilities that are task-organized into a selected force based on the mission, operational environment assessment, constraints, restraints, and the commander's risk assessment.

The ASCC performs three strategic and operational-level tasks—

- Establishes linkages and coordinate with the joint force headquarters and other service component commanders.
- Conducts operations.
- Conducts support operations to sustain the ARFOR assigned to the theater.

The ASCC's strategic task is to carry out the strategic logistics tasks and priorities of the Combatant Commander. The ASCC is responsible for sustaining all forces in theater and maintaining capability to expand to accommodate ARFOR required for theater operations plans. The ASCC coordinates terrain management and host nation support for theater operations.

The ASCC operates within the theater's developed infrastructure and Combatant Commander's strategic priorities to receive forces and resources through seaports of debarkation (SPOD) and aerial ports of debarkation (APOD). The ASCC establishes the logistics infrastructure for theater operations and assists in establishing and adjusting theater lines of communication (LOC). The ASCC receives, equips, marshals, stages, and moves units forward to the tactical assembly areas for employment. The ASCC continues to support and reconstitute these deployed ARFOR. Upon termination of conflict, the ASCC continues to provide support to the ARFOR to allow redeployment and reconstitution of the force.

Army Group: An army group is an organization that may be established as an intermediate operational echelon between field armies and either a theater army or a unified or combined command. . An army group headquarters provides command and control of two to five field armies. Army groups have not been employed since WWII.

Field Army: A field army will control and direct the operations of 2-5 corps. They are normally constituted from existing army assets and structured for specific operational requirements. They are the primary units of operational maneuver, conducting the decisive operations of the land campaign. (General Schwartzkopf commanded a Field Army during Operation Desert Storm and during Operation Iraqi Freedom; the Corps was the largest Army organization employed.)

Corps: 20,000 to 80,000 soldiers. A Corps is a deployable level of command required to synchronize and sustain combat operations. It also provides the framework for multinational operations. A Corps provides command, control and logistical support for two to five divisions and is commanded by a Lieutenant General (0-9) and an extensive Corps staff. There are currently four Corps in the Active Army three with Headquarters in the Continental United States (I, III, and XVIII Corps) and one in Germany (V Corps).

Division: 10,000 to 16,000 soldiers. The Division performs major tactical operations and can conduct sustained battles and engagements. Divisions are numbered (e.g., 1st Armored Division, 82nd Airborne Division) and are categorized by one of five types: Light Infantry, Mechanized Infantry, Armor, Airborne or Air Assault. A Division is commanded by a Major General (0-8) who is assisted by two principal Brigadier Generals (0-7) who perform duties as Assistant Division Commanders one for Maneuver and one for Support. The Command

Sergeant Major (E-9) is the principal non-commissioned officer assistant. Divisions are comprised of three tactical maneuver (Infantry and/or Armor) Brigades and a Division base of combat support and combat service support elements. There are ten divisions in the Active Army and eight Divisions in the Reserves/National Guard. In October 1999, The Army established two Integrated Divisions (the 7th Infantry Division and 24th Infantry Division) consisting of an Active Component headquarters commanded by an Active Component Major General (O-8), and three Army National Guard Enhanced Separate Brigades.

Brigade: Brigade/Group/Regiment: 1,500 to 3,200 soldiers. A brigade is a significantly large unit that can be employed on independent or semi-independent operations. A Colonel (O-6) normally commands the brigade and a Command Sergeant Major (E-9) is the principal non-commissioned officer assistant. During combat operations, Infantry, Armor and Cavalry Brigades normally have field artillery, engineer and combat service support battalions in direct support. Functional brigades exist in combat service and combat service support branches (e.g., Engineer Brigade, Signal Brigade). An Armored Cavalry Regiment, a Ranger Regiment and a Special Forces Groups are unit size equivalents to a brigade.

C. Types of Divisions

Light Infantry Division. A formation optimized for employment at the lower end of the conflict spectrum. It is organized for rapid deployment by strategic airlift and provides a flexible and sustainable force to exploit the advantages of restricted terrain and limited visibility.

Capabilities:

- Operates in all types of terrain.
- Least amount of strategic lift required.
- Operates independently for 48 hours.
- Conducts special purpose missions: raids, feints, and demonstrations.
- Conducts air movement or air assault operations.
- When augmented with mobility assets, conducts Rear Area Operations as follow and support operations for heavy forces.

Limitations:

- Austere CS and CSS systems.
- Vulnerable to attack by Mechanized or Armor forces.
- Limited organic transportation.
- Requires external logistical support for extended operations.
- Requires additional external Fire Support: CAS and NSFS.
- Does not have force entry capability.

Airborne Division. An airborne division is capable of rapid deployment anywhere in the world to seize and secure vital objectives. It conducts parachute assaults to capture initial lodgments, execute large scale tactical raids, secure intermediate staging bases or rescue US nationals besieged overseas. It also can serve as a strategic or theater reserve.

Capabilities:

- Conducts forcible entry operations.

- Conducts combined arms combat parachute operations to seize and secure vital objectives.
- Occupies areas or reinforces friendly or allied forces beyond the immediate reach of ground forces.
- Captures intermediate staging bases for ground or air operations.
- Reinforces forward deployed forces.
- Serves as strategic or theater reserve.
- Conducts large-scale tactical raids.

Limitations:

- Dependent on Air Force aircraft for movement and sustainment until ground force linkup established.
- Requires suppression of enemy air defense systems and enemy air forces on ingress/egress routes and over the objective area.
- Limited tactical ground mobility assets.
- Requires more CAS due to limited organic artillery.
- Vulnerable to enemy heavy forces.
- Requires longer planning time & joint C2

Air Assault Division. The air assault division combines strategic deployability with tactical mobility within its area of operations. Air assault operations involve combat, CS and CSS elements that are task organized for tactical operations. Air assault operations generally involve insertions and extractions under hostile conditions. Organic aviation assets allow for rapid mobility over all types of terrain to achieve strategic and tactical advantages.

Capabilities:

- Maintains a rapid tempo to seize and maintain tactical initiative.
- Contains substantial anti-armor capability.
- Over-fly barriers, bypasses enemy strong points, and achieves surprise.
- Conducts simultaneous operations over a wide area.
- Ability to disperse, concentrate, and redeploy rapidly.
- Rapidly moves artillery and concentrates attack helicopters to provide fire support.

Limitations:

- Large logistical support required for helicopters.
- Operations are weather dependent.
- Vulnerable to enemy air forces and air defense systems.
- Limited tactical ground mobility once away from air mobility systems.
- Intensive strategic lift requirement.

Armored Division. Armored and Mechanized divisions provide mobile, armor-protected firepower to the force structure. Heavy divisions are normally employed for their mobility, survivability, lethality and psychological effect on the enemy. This formation employs mixture of Abrams tanks, Bradley armored fighting vehicles, TOW anti-tank missiles, AH-64 helicopters, mortar and artillery systems.

Capabilities:

- Rapidly concentrates overwhelming firepower.
- Conducts rapid movement, deep penetration, and pursuit operations.
- Equipped with protection systems for operations in Nuclear, Biological and Chemical environments.
- Conducts covering force operations and serves as an effective counter attack force.
- Conducts sustained combat operations.

Limitations:

- Primary fighting vehicles are air transportable by C-5 and C-17 but normally deployed by sealift or from pre-positioned sites.
- Restricted vehicle mobility in urban, mountain, and jungle terrain.
- Logistically demanding due to high consumption rates of all classes of supply.
- Not capable of rapid strategic deployment without extensive pre-positioning.
- Cannot conduct forcible entry from strategic transportation.

Mechanized Division. The mechanized division has essentially the same structure as an armored division but has fewer tanks and more Bradley Fighting Vehicle Systems. The capabilities and limitations are essentially the same as for an armored division.

Cavalry Regiments. Corps level brigade sized, combined arms organizations that serve as a reconnaissance asset for the Corps Commander. This formation provides a mixture of scout, strike/light armor/armored, aviation, engineer, air defense and artillery forces capable of independent operations at extended distances from other units. There are two types of cavalry regiments, armored and light.

The Armored Cavalry Regiment (ACR) is a self-contained combined arms organization composed of armored cavalry squadrons (ACS), an aviation squadron, a support squadron, and separate combat support companies and batteries. The ACR is a separate unit that supports the corps or a joint task force. The ACR is equipped with M-1 tanks, M-3 scout vehicles (Bradleys), and having OH-58D scout and AH-64 attack helicopters, the ACR is manned by around 4-5,000 personnel and contains its own combat support units. ACR normally deploys to a theater of operations by sealift.

The Armored Cavalry Regiment (Light) is a self-contained combined arms organization capable of being deployed by air or sealift as part of a force projection Army responding to worldwide contingencies. The role of the ACR (L) may be traditional, initial entry, or follow-on. The traditional role would support a U S corps or task force through a reconnaissance, security, and economy-of-force capability. As an initial entry force the ACR (L) would support Army or joint task force operations with credible force as a demonstration of U S resolve. In the follow-on role, the ACR (L) will follow an opposed entry force (division ready brigade type) to expand the point of entry, to provide reconnaissance and security, and to serve as the initial combat-capable maneuver force.

The capabilities and limitations are essentially the same as for an armored division.

| US ARMY ORGANIZATION FOR COMBAT | | | |
|---------------------------------|---------------------------|---------------|--------------|
| UNIT SYMBOL | HEADQUARTERS | SIZE | COMMANDED BY |
| XXXX | FIELD ARMY | 2-5 CORPS | 0-9/10 |
| XXX | CORPS | 2-5 DIVISIONS | 0-9 |
| XX | DIVISION | 10,000-16,000 | 0-8 |
| X | BRIGADE | 3,000-5,000 | 0-6 |
| | GROUP OR REGIMENT | 1,000-2,000 | 0-6 |
| | BATTALION OR SQUADRON | 500-900 | 0-5 |
| | COMPANY, BATTERY OR TROOP | 90-200 | 0-3 |
| ••• | PLATOON OR DETACHMENT | 40-60 | 0-1/2 |
| •• | SECTION | 20-30 | E-6 |
| • | SQUAD | 8-11 | E-5 |

III. Concepts of Operations

Army Operations. The US Army's war fighting doctrine reflects the nature of modern warfare. It applies principles of war and combat power dynamics to contemporary and anticipated future battlefields within the strategic policy direction of our government. It is inherently joint doctrine that recognizes teamwork required of all services and the extension of the battlefield in time, space, and purpose through all available resources and campaign design. US Army doctrine is compatible with joint doctrine. It recognizes that a joint force commander has a variety of ground, sea, air, and space options available to accomplish strategic objectives.

The Tenets of Army Operations

Initiative. Initiative has both operational and individual components. From an operational perspective, **initiative is setting or dictating the terms of action throughout the battle or operation.** Initiative implies an offensive spirit in all operations. To set the terms of battle, commanders eliminate or reduce the number of enemy options. They compel the enemy to conform to friendly operational purposes and tempo, while retaining freedom of action.

From an individual perspective, initiative is the ability to be a self-starter, to act when there are no clear instructions or when the situation changes. An individual leader with initiative is willing to decide and initiate independent actions when the concept of operations no longer applies or when an unanticipated opportunity leading to the accomplishment of the commander's intent presents itself. Initiative requires delegating decision-making authority to the lowest practical level and giving subordinates the greatest possible freedom to act.

Agility. **Agility is the ability to move and adjust quickly and easily.** It springs from trained and disciplined forces. Agility requires that subordinates act to achieve the commander's intent and fight through any obstacle to accomplish the mission.

Operational agility stems from the capability to deploy and employ forces across the range of Army operations. Army forces and commanders shift among offensive, defensive, stability,

and support operations as circumstances and missions require. Tactical agility is the ability of a friendly force to react faster than the enemy. It is essential to seizing, retaining, and exploiting the initiative. Agility is mental and physical. Agile commanders quickly comprehend unfamiliar situations, creatively apply doctrine, and make timely decisions.

Depth. **Depth is the extension of operations in time, space, and resources.** Commanders use depth to obtain space for effective maneuver, time to conduct operations, and resources to achieve and exploit success. Depth enables momentum in the offense, elasticity in the defense, and staying power in all operations.

Synchronization. **Synchronization is arranging activities in time, space, and purpose to mass maximum relative combat power at a decisive place and time.** Without synchronization, there is no massing of effects. Through synchronization, commanders arrange battlefield operating systems to mass the effects of combat power at the chosen place and time to overwhelm an enemy or dominate the situation. Synchronization is a means, not an end. Commanders balance synchronization against agility and initiative; they never surrender the initiative or miss a decisive opportunity for the sake of synchronization.

Versatility. **Versatility is the ability of Army forces to meet the global, diverse mission requirements of full spectrum operations.** Competence in a variety of missions and skills allows Army forces to quickly transition from one type of operation to another with minimal changes to the deployed force structure. Versatility is a characteristic of multifunctional units. At higher echelons, versatility implies the ability to assume more complex responsibilities.

I. Combat Support (CS) and Combat Service Support (CSS) Capabilities

Within the US Army there exists both in the Active and Reserve/National Guard, significant Combat Support (CS) and Combat Service Support (CSS) capabilities that not only support major Army formations but also the joint force commander. The five (5) Combat Support branches, which provide operational assistance to Combat Arms, and eight (8) Combat Service Support branches, which provide the critical resources and capabilities to arm, fuel, transport and maintain materials and supplies for the Combat Arms and Combat Support branches. In addition to these branches, Civil Affairs and Psychological Operations are functional capabilities that perform CS tasks.

Combat Support Branches

Engineer: A Combat Support branch that provides support to maneuver commanders in mobility (river crossings, gap crossings, obstacle clearance), countermobility (obstacle emplacement, demolitions), survivability (tracked vehicle fighting positions, site hardening), general engineering (infrastructure development) and topographic (mapping) missions. Engineers also perform Combat Arms functions (fight as Infantry) and Combat Service Support (logistics) functions.

Chemical: A Combat Support branch that is focused on warfighting operations and training in support of nuclear, biological and chemical (NBC) defense; smoke, obscurants and flame

employment; chemical arms control verification and related scientific development and material management activities.

Military Intelligence: A Combat Support branch that provides timely, relevant and accurate intelligence and electronic warfare support to commanders at all levels of war – tactical, operational and strategic. One of the primary functions at the tactical level is to provide commanders with an intelligence preparation of the battlefield (IPB) to reduce the commander's uncertainty regarding enemy, terrain and weather.

Military Police: A Combat Support branch that supports force projection across the full spectrum of Army operations (wartime and peacetime) to include: maneuver and mobility support (route reconnaissance, refugee control), area security operations, law and order operations, internment and resettlement operations and police intelligence operations. MP's also provide Combat Service Support functions related to security, safety and cross-cultural operations.

Signal: A Combat Support branch that plans, installs, integrates, operates and maintains the Army's strategic, operational and tactical communications infrastructure and voice and data information systems, services and resources in support of wartime and peacetime operations.

Combat Service Support Branches

Adjutant General: A Combat Service Support branch that formulates, interprets and implements policy for and directs all Army military personnel management functions, to include personnel readiness, accountability, assignment and distribution, mobilization, soldier processing, and postal operations.

Chaplain: A Combat Service Support branch that provides the religious, spiritual, moral and ethical support to the Army in all operations through worship, education, policy, leadership practices and support to the commander.

Finance: A Combat Service Support branch that sustains Army operations through the acquisition and purchase of most classes of supply and services, to include disbursement, commercial vendor service, military pay support, travel payments and forward pay support on the battlefield.

Judge Advocate General: A Combat Service Support branch that manages the delivery of total legal services to the Army and its members, to include military justice/criminal law, administrative law, regulatory law, environmental law, litigation and legal assistance

Ordnance: A Combat Service Support branch that supports the development, production, acquisition and sustainment of weapon systems and ammunition, missiles, electronics and ground mobility material during wartime and peacetime operations.

Quartermaster: A Combat Service Support branch that sustains Army operations through logistical support to include supply support, field services, aerial delivery support, and material and distribution management.

Transportation: A Combat Service Support branch that provides the transportation capabilities for force projection into theaters of operation to include the worldwide movement of units, personnel, equipment and supplies.

Medical: The Army Medical Department provides full health services to the Army through six (6) individual Corps to include the Medical Corps (doctors, surgeons), Nurse Corps, Dental Corps, Veterinary Corps, Medical Service Corps (sanitation, environmental quality) and Medical Specialty Corps (medical supplies and services).

V. Information Operations (IO)

“Information Operations is the employment of the core capabilities of Electronic Warfare, Computer Network Operations, Psychological Operations, Military Deception, and Operations Security, in concert with specified supporting and related capabilities, to affect or defend information and information systems, and to influence decision making.”

FM 3-13, Information Operations, Doctrine, Tactics, Techniques, and Procedures, 28 Nov 2003
(Note: supercedes FM 3-0 definition of IO)

The US Army had an initial mandate in 1996 to act as the IO focal point for the land base information operations. The original oversight organization for IO was the Land Information Warfare Activity (LIWA). LIWA was ill prepared for this mission due to a lack of force structure dedicated to planning and synchronizing IO.

1st Information Operations Command (1 IOC) was established to oversee land based information operations. Part of the 1st IOC mission is to provide IO expertise to support the land component of joint forces. This includes support to both the Army & Marine Corps. This organization assists TRADOC in doctrine, training, and leader development, as well as in organizational design, material and soldier systems development

VI. Army National Guard and Army Reserves

Organization

The Army relies heavily on the Army National Guard and Army Reserve; over half the Army force structure is in the Reserve components, including forces in each of the strategic force packages. The Army National Guard has an authorized end strength of 422,725. The Army Reserve has authorized end strength of 279,615 soldiers in the Selected Reserve, plus 279,600 members in the Individual Ready Reserve and an additional 599,965 members in the Retired Reserve.

The Army maintains eight National Guard combat divisions (four heavy, three medium, one light), 15 enhanced readiness brigades, two strategic reserve brigades, and one scout group. The Army National Guard enhanced brigades (E-BDE) are the principal Reserve component ground combat maneuver forces of the United States Army. The E-BDE may reinforce, augment, or provide rotational backfill for Active component units as required by the theater commander to which they are assigned. To ensure flexibility, the Army structured seven of the enhanced brigades in a heavy configuration, seven in a light configuration, and one as an armored cavalry regiment.

Roles, Missions, and Functions

Army National Guard: The Army National Guard has federal, state and community functions. It is directly accessible by the National Command Authority and is responsive to state governors as well. Its federal function is to support U.S. national security objectives by providing trained and equipped units for prompt mobilization in the event of national emergency or war. Its state functions are to protect life and property and to preserve peace, order and public safety. Its community function is to participate in local, state and national programs that add value to America. The Army National Guard is changing its focus from reinforcing a forward-deployed Army during global conflict to a force that is prepared for implementation across the operational spectrum. When federalized, Army National Guard unit control passes to the active CONUS Army unit in the area where their mobilization stations are located.

Army Reserve: The Army Reserve is a federal force whose function is to provide trained units and qualified individuals for active duty in time of war or national emergency and at such other times as the national security requires. The Army Reserve has extensive civil affairs, engineer, medical, training, and transportation assets that are well suited for domestic and humanitarian missions. The Army Reserve's capability in its primary support function is enhanced by the civilian experience and unique skills of its soldiers. A large share of early deploying (within 10 days of mobilization) combat service support units comes from the Army Reserve.

VII. Transformation: The Way Ahead

Today's joint expeditionary operations require the Army to respond rapidly to a joint force commander with forces that can be deployed, employed, and sustained immediately and simultaneously on arrival in distant, austere theaters. Joint interdependence relies on all the services and Defense agencies to maximize their complementary capabilities and minimize their vulnerabilities in order to fulfill the mission requirements of the joint force commander.

Supporting joint operations requires a campaign-quality Army. The campaign quality of an Army is its ability to win decisive combat operations and to sustain those operations for as long as necessary while quickly adapting to unpredictable changes in the context and character of the conflict. The Army's preeminent challenge is to reconcile expeditionary agility and responsiveness with the staying power, durability, and adaptability needed to carry a conflict to a successful conclusion.

The Army's new conceptual framework employs modular combat units and organizations. Maneuver in an expeditionary, noncontiguous environment will put a premium on both unit agility and unit capacity. While self-sufficiency provides a greater level of operational freedom, the Army needs to ensure that logistics assets do not overburden the commander's maneuver flexibility. The Army must develop a solution that balances the additional logistics support needed for BCT self-reliance with the brigade commander's requirement for freedom of action and mobility. The future active Army will leverage modularity and technology to increase the current 33 brigade structure to 48 Brigade Combat Teams. The National Guard structure will change from the current 15 Enhanced Separate Brigade structure to 22 Enhanced Separate Brigades. These changes will occur without significant end strength increases.

During the Cold War, Army doctrine defined three distinct types of forces - Heavy, Light and Special Forces. Each of these communities possessed its own distinct set of combat capabilities and missions, and as a result developed its own unique culture. As the Army moves to the Objective Force -- as evidenced by the IBCT -- it is erasing the distinctions between heavy and light forces and is training conventional units using special operations techniques. Objective Force units will be substantially different in structure and content than their predecessors. Combined arms will be organic at lower tactical levels. Units will be modular and organizations will be highly versatile.

The Objective Force is designed around units of employment (UE) and units of action (UA). UEs are command and control structures that synchronize and coordinate battle operating systems to allow UAs to perform their missions. A UE is analogous to a division in today's Army. A UA is analogous to a maneuver brigade in today's Army; brigades are the units of choice for tactical missions immediately on entering a theater and in fluid situations. UAs are employed to achieve their assigned objectives throughout military operations. The success of these units on the battlefield is predicated on assuming that these units will be able to "see first, understand first, act first, and finish decisively"; these organizations have robust command, control, communications, and computer, intelligence, surveillance, and reconnaissance capabilities to ensure this happens. Battalions within the UA are combined arms battalions that coordinate small fighting units' actions into collective actions or dispersed separate actions.

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CHAPTER 2

UNITED STATES AIR FORCE

Air Force Vision

Global vigilance, reach and power.

Air Force Mission

The mission of the United States Air Force is to deliver sovereign options for the defense of the United States of America and its global interests -- to fly and fight in Air, Space, and Cyberspace.

I. Concept of Operations

Two principles--unity of command and centralized control/decentralized execution--are the key pillars of our doctrine. We believe that Airmen work for Airmen and the senior Airman works for the joint force commander. These precepts have served us well over time, and for the most part, we've unconsciously internalized and applied them. Air Force capabilities, to include people, weapons, and support systems, can be used across the range of military operations at the strategic, operational, and tactical levels of war.

The United States Air Force is the chief proponent for air and space power within the military. It is necessary to understand when employing air and space power that it is intrinsically different from either land or sea power, and its employment must be guided by axioms different than those of surface forces. Both air and space mediums involve operations in three dimensions, sharing the advantages of three-dimensional maneuver.

Tenets of Air and Space Power

The application of air and space power is refined by several fundamental guiding truths. These truths are known as tenets. They reflect not only the unique historical and doctrinal evolution of airpower, but also the specific current understanding of the nature of air, and space, power. The tenets of air and space power complement the Principles of War. While the Principles of War provide general guidance on the application of military forces, the tenets provide more specific considerations for air and space forces.

Centralized Control/Decentralized Execution - Fundamental organizing principle for air and space power. Because of air and space power's unique potential to directly affect the strategic and operational levels of war, it must be controlled by a single Airman who maintains the broad, strategic perspective necessary to balance and prioritize the use of a powerful, highly desired yet limited force. **Centralized Control** of air and space power is the planning, direction, prioritization, synchronization, integration, and deconfliction of air and space capabilities to achieve the objectives of the joint force commander. **Decentralized Execution** of air and space power is the delegation of execution authority to responsible and capable lower-level commanders to achieve effective span of control and to foster disciplined initiative, situational responsiveness, and tactical flexibility.

Flexibility and Versatility – **Flexibility** allows air and space forces to exploit mass and maneuver simultaneously, and allows air and space operations to shift from one campaign objective to another, quickly and decisively. **Versatility** is the ability to employ air and space power effectively at the strategic, operational, and tactical levels of warfare. Air and space forces, unlike other military forces, have the potential to achieve this unmatched synergy through asymmetric and parallel operations.

Synergistic Effects – Proper application of a coordinated force can produce effects that exceed the contributions of forces employed individually.

Persistence – Air and space power’s exceptional speed and range allow its forces to visit and revisit wide ranges of targets nearly at will. Air and space power does not have to occupy terrain or remain constantly in proximity to areas of operation to bring force upon them.

Concentration – Air and space power must achieve concentration of purpose. The versatility of air and space power makes it an attractive option for almost every combat task. Airmen must guard against the inadvertent dispersion of air and space power effects resulting from high demand.

Priority – Air and space power must be prioritized. Given their flexibility and versatility, demands for air and space forces will likely overwhelm air commanders in future conflicts unless appropriate priorities are established. Effective prioritization flows from an informed dialogue between the joint or combined forces commander and the air component commander.

Balance – Balance is an essential guideline for air commanders. Much of the skill of an air commander is reflected in the dynamic and correct balancing of the principles of war and the tenets of airpower to bring air and space power together to produce a synergistic effect. An air commander should balance combat opportunity, necessity, effectiveness, efficiency, and the impact on accomplishing assigned objectives against the associated risk to friendly air and space forces.

Core Competencies

The Air Force has three Core Competencies that focus on producing combat capability for the joint warfighter by leveraging our superior people and technology.

➤ ***Developing Airmen: The heart of combat capability:*** At no time in the history of modern warfare has a force been as well trained, well equipped, and highly motivated as our Air Force is today. They are the linchpin that enables us to deliver worldwide strike, mobility, reconnaissance, and support. The full spectrum of our air and space capabilities stems from the collective abilities and expeditionary mindset of our personnel. And in today’s world of swiftly flowing information and powerful technologies, every individual role in our Total Force – active, Guard, Reserve, and civilian – carries greatly increased significance.

➤ ***Technology-to-warfighting: The tools of combat capability:*** It is our unique ability to apply various technologies in unison so effectively that allows us to translate our air and space

power vision into decisive operational capability. The Predator unmanned aerial vehicle is today's perfect example of this core competency in action. It combines the dynamics of manned aviation with the remote operation techniques of unmanned satellites and the information connectivity of networks into a single system capable not only of collecting and disseminating information, but of producing combat effects.

➤ ***Integrating Operations: Maximizing combat capabilities:*** In the fast-paced combat environment of the 21st century, victory belongs to those who can most quickly collect intelligence, communicate information, and bring capabilities to bear against targets around the globe. Executing these complex tasks with accuracy, speed, and power requires the seamless integration of systems, activities, and expertise across all manned, unmanned, and space capabilities. This is precisely what our Joint and Combined Air Operations Centers achieve. They effect a union of a myriad of capabilities and people into a synergistic whole – a center of integration pivotal to successful joint warfighting. The result – integrated operations – is our unique ability to conduct Predictive Battlespace Awareness and bring effects on the enemy at times and places of our choosing.

Our proficiency in these three institutional core competencies underpins our ability to deliver the Air Force's six distinctive capabilities in joint warfighting. In turn, our capabilities enable desired effects across the spectrum of joint operations. The results of this relationship among core competencies, distinctive capabilities, and operational effects are evidenced by the array of successful missions the Air Force has accomplished and those we continue to execute.

Distinctive Capabilities

The Air Force has six distinctive capabilities, which spring directly from these core competencies. These distinctive capabilities will continue to be those vital areas of expertise we bring to any military operation or activity.

Our distinctive capabilities represent the combination of professional knowledge, air and space power expertise, and technological fluency that, when applied, produces superior military capabilities or effects. They are the basic areas of expertise that the Air Force brings to any activity across the spectrum of military operations, whether as a single Service or in conjunction with other Services in joint operations. The distinctive capabilities are not necessarily unique to the Air Force, but represent what the Air Force does better than any other organization. What distinguish the Air Force's distinctive capabilities from those of the other services are the speed and the global nature of our reach and perspective.

Air and Space Superiority assures the friendly use of the environment while denying its use to an enemy. Gaining air and space superiority is a vital first step in military operations. Control of air and space enhances and may secure freedom of action for friendly forces in all geographical environments-land and sea as well as air and space. Air and space superiority provides freedom to attack as well as freedom from attack. Success in air, land, sea, and space operations depends upon air and space superiority. Air and space superiority normally is the joint force commander's first priority for air and space forces. There are two levels of air superiority. ***Air superiority*** is that degree of dominance which permits the conduct of air operations at a given time and place without prohibitive interference. "Prohibitive interference" is not defined

within doctrine, but here is a good working definition. Air superiority means the enemy can still impede our progress but can't stop us—we can still accomplish our objectives.

Air supremacy is that degree of air superiority wherein the opposing air force is incapable of effective interference. Air Supremacy, on the other hand, indicates a greater degree of control whereby the enemy is now incapable of interfering. Normally, airpower tasking via OPORDs is for air superiority, not air supremacy. Air supremacy requires a much greater weight of effort to achieve and maintain with potentially little more benefit than air superiority. It's all a matter of the resources the JFC decides should be placed against this critical objective.

Information Superiority is the ability to collect, control, exploit, and defend information while denying an adversary the ability to do the same. Like air and space superiority, information superiority includes gaining control over the information realm and fully exploiting military information functions.

Global Attack is the ability of the Air Force to attack rapidly and persistently with a wide range of munitions anywhere on the globe at any time. Depending on the assigned mission and the specific system required, the responsiveness of air and space forces can be instantaneous. It has two distinct aspects. The first part is that our forces stationed in the US are capable of finding, fixing and attacking targets anywhere in the world within a matter of hours. This capability means the Air Force operates at all three levels of war sequentially, or simultaneously, from day one of a crisis. The other dimension of Global Attack is our expeditionary nature and ability to go forward and provide sustained combat power for indefinite periods of time.

Precision Engagement is the ability to command, control, and employ discriminate forces to cause specific strategic, operational, or tactical effects precisely where required.

Rapid Global Mobility refers to the timely movement, positioning, and sustainment of military forces and capabilities through air and space, across the range of military operations.

Agile Combat Support refers to the requirement to support light, agile and far ranging forces, which must be the first in during a crisis. It includes lean logistics and our ability to set up support for employing rapidly deployable, light support and combat forces.

Now that we've looked at the core competencies, distinctive capabilities and the tenets of air and space power, let's discuss briefly air and space power operational functions. Air and Space power functions are not unique to the Air Force, but are the broad, fundamental, and continuing activities of air and space power.

II. Operational Functions

Operational functions are tied to achieving specific effects. Effects are outcomes, events, or consequences resulting from specific actions; they should contribute directly to desired military and political outcomes. This requires commanders and planners to explicitly and comprehensively link, to the greatest extent possible, each tactical action to strategic and operational objectives. This linkage is at the heart of effects-based operations (EBO), which are

those actions taken against enemy systems designed to achieve specific effects that contribute directly to objectives. Commanders and planners must have a clear understanding of national security and campaign objectives and those actions necessary to create effects that cumulatively result in the desired end-state.

Strategic Attack (SA) is defined as offensive action conducted by command authorities aimed at generating effects that most directly achieve our national security objectives by affecting the adversary's leadership, conflict-sustaining resources and strategy. Many times these operations achieve strategic effects by striking at the enemy's COGs. These operations are designed to achieve their objectives without first having to necessarily engage the adversary's fielded military forces in extended operations at the operational and tactical level of war. The target defines SA rather than the weapons system used.

Counterair consists of operations to attain and maintain a desired degree of air superiority by the destruction or neutralization of enemy forces. **Offensive counterair (OCA)** destroys, neutralizes, disrupts, or limits the enemy air and missile power as close to its source as possible and at a time and place of our choosing. **Defensive counterair (DCA)** concentrates on defeating the enemy's offensive plan and on inflicting unacceptable losses on attacking enemy forces.

Counterspace involves those kinetic and nonkinetic operations conducted to attain and maintain a desired degree of space superiority by the destruction, degradation, or disruption of enemy space capability. Allows friendly forces to exploit space capabilities, while negating the enemy's ability to do the same. This includes both offensive and defensive counterspace operations.

Counterland involves those operations conducted to attain and maintain a desired degree of superiority over surface operations by the destruction or neutralization of enemy surface forces. Specific subordinate functions associated with counterland operations are air interdiction and close air support. Interdiction is a form of joint maneuver with joint means. Interdiction consists of operations to divert, disrupt, delay, or destroy the enemy's surface military potential before it can be used effectively against friendly forces. **Air interdiction's (AI)** ability to delay and disrupt may have a devastating impact on the enemy's plans and ability to respond to the actions of friendly forces, even before friendly surface forces appear in the battlespace. **Close Air Support (CAS)** provides direct support to help friendly surface forces in contact with enemy forces carry out their assigned tasks. These operations require detailed integration of each air mission with the fire and movement of those forces.

Countersea functions are an extension of Air Force capabilities into a maritime environment. The identified specialized collateral tasks are sea surveillance, antiship warfare, protection of sea lines of communications through antisubmarine and anti-air warfare, aerial minelaying, and air refueling in support of naval operations.

Information Operations (IO) are actions taken to influence, affect or defend information, systems and/or decision-making to create effects across the battlespace. IO must be integrated into air and space component operations in the same manner as traditional air and space

capabilities. More specifically, it is those activities that influence or affect the adversary's "observe-orient-decide-act" (OODA) loop while protecting our own.

Combat Support is the essential capabilities, functions, activities, and tasks necessary to create and sustain air and space forces. It includes the procurement, maintenance, distribution, and replacement of personnel and materiel. In warfighting terms, combat support is "the science of planning and carrying out the movement, and maintenance, and protection of forces, as well as ensuring an effective combat support command and control process of those forces."

Command and Control includes both the process by which the commander decides what action is to be taken and the system that monitors the implementation of the decision. It includes battlespace management and the process of planning, directing, coordinating and controlling forces and operations.

Airlift is viewed as: Intertheater, which provides the air bridge that, links theaters to the CONUS and to other theaters, as well as airlift within the CONUS. Intratheater airlift provides the air movement of personnel and materiel within a COCOM's area of responsibility. Operational support airlift is provided by assets that are an integral part of a specific service, component, or major command and that primarily support the requirements of the organization to which they are assigned.

Air Refueling expands the employment options worldwide and is especially important when overseas basing is limited or not available. It supports SIOP, long-range conventional strategic attack missions, deployment of air assets to a theater, air bridge and combat/combatsupport aircraft operating within a theater.

Spacelift projects power by delivering satellites, payloads, and materiel into or through space. Its objective is to launch or deploy new or replenish space assets as necessary to achieve national security objectives.

Special Operations is the use of special airpower operations (denied territory mobility, surgical firepower, and special tactics) to conduct the following special operations functions: unconventional warfare, direct action, special reconnaissance, counterterrorism, foreign internal defense, psychological operations, and counterproliferation.

Intelligence provides clear brief, relevant, and timely analysis of foreign capabilities and intentions for planning and conducting military operations.

Surveillance and Reconnaissance are complementing items. Surveillance is the systematic observation of air, space, surface, or subsurface areas, places, persons, or things, by visual, aural, electronic, photographic, or other means. Reconnaissance complements it in obtaining, by visual observation or their detection methods, specific information about the activities and resources of an enemy or potential enemy; or in securing data concerning the meteorological, hydrographic, or geographic characteristics of a particular area.

Combat Search and Rescue recovers distressed personnel during wartime or MOOTW and is key to sustaining the morale, cohesion and fighting capability of friendly forces.

Navigation and Positioning provides accurate location and time of reference in support of strategic, operational, and tactical operations.

Weather Services provide timely and accurate environmental information, including both space environment and atmospheric weather for selection of targets, routes, weapons systems and delivery tactics.

III. Organization

The Air Force’s organization at the secretary and service chief level is similar to both the Army and the Navy/USMC organizations. Subordinate to the Secretary of the Air Force are the major commands. A major command or “MAJCOM,” is a subdivision of the Air Force that is assigned a major part of the Air Force’s responsibilities. The MAJCOMs may be organized on a functional or geographic basis.

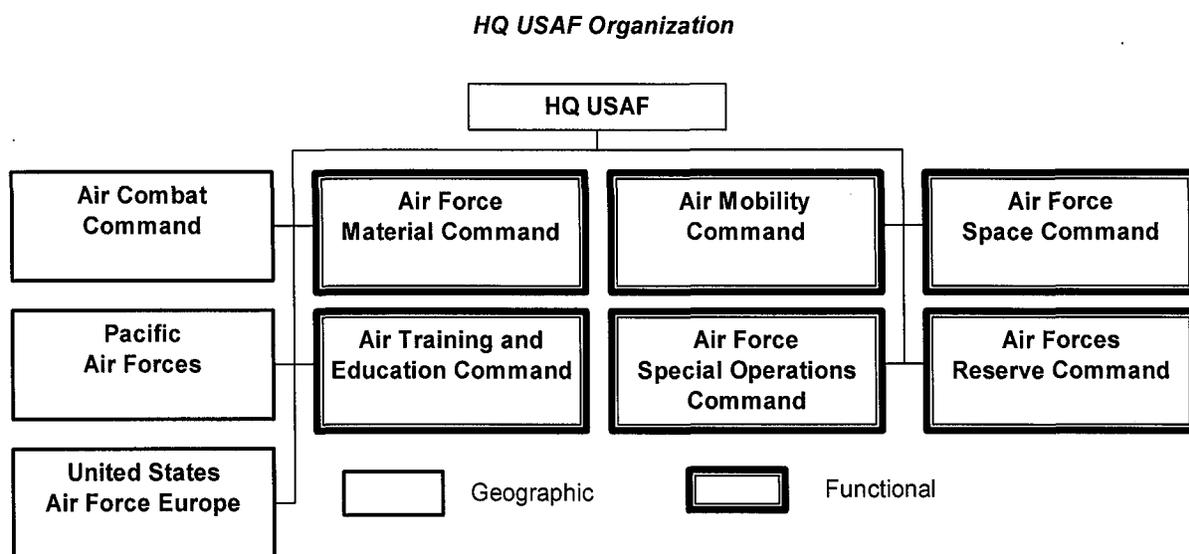


Figure III-1

MAJCOMs are administratively linked to the Secretary of the Air Force and most serve in direct support of one or more Combatant Commanders. MAJCOMs are equivalent to the Army “MACOM” (e.g. TRADOC), a Navy “Fleet” (e.g. LANTFLT) or Marine “MEF”. The wiring diagrams and the responsibilities of the MAJCOMs (PACAF, AFSOC, USAFE, ACC, AMC, AFSPC, AETC and AFMC) are provided in this section. The first six of these provide significant forces to the COCOMs. Some MAJCOMs and Numbered Air Forces (NAFs) are the service components of Combatant Commands. See Figure III-2. As an example, ACC is the service component for JFCOM, STRATCOM, and NORTHCOM.



MAJCOMs & Numbered Air Forces

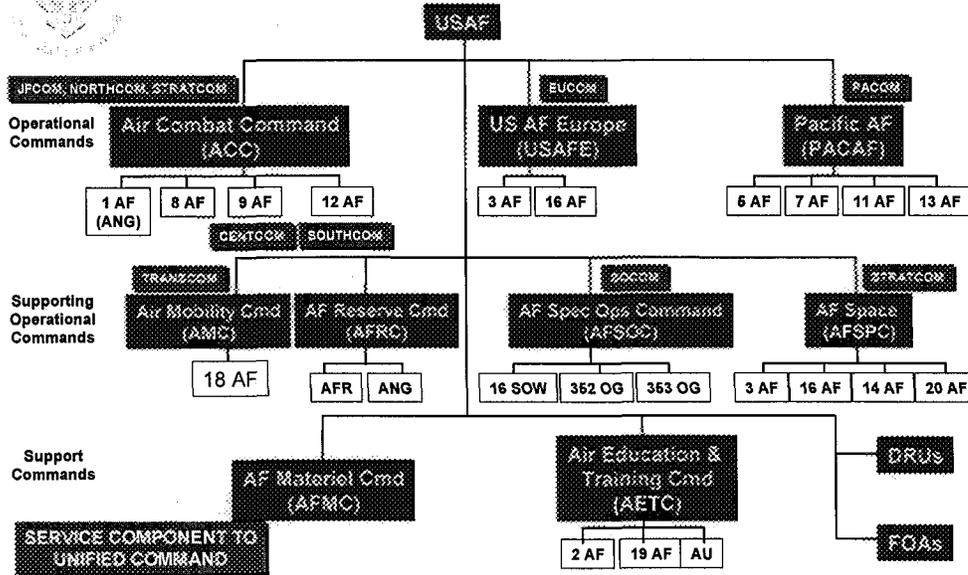


Figure III-2

The next major level within the Air Force under the MAJCOM is the Numbered Air Force or “NAF.” These are the equivalent of the Army Numbered Armies or the Naval Numbered Fleets and are further subdivided into wings that are brigade equivalents (Figure III-3).

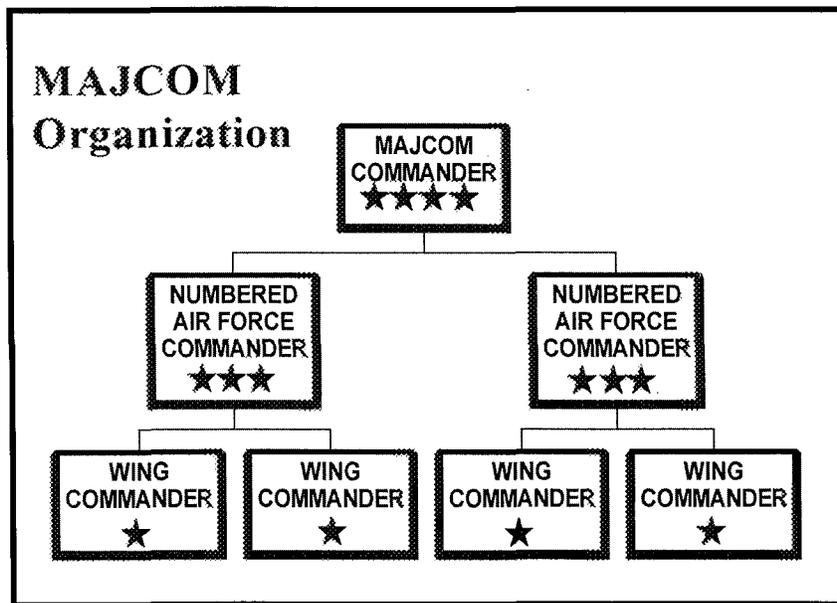


Figure III-3

A “wing” usually consists of one type of aircraft. However, several wings, such as the 3rd Wing at Elmendorf, have fighters, airlift, and AWACS collocated for employment within the wing’s AOR. Additionally, composite wings, established at Mountain Home, Pope and Moody, feature a mix of fighters, bombers, tankers, and other types of aircraft. Mountain Home is a “Composite

Interdiction Wing” and includes bombers. Pope and Moody are “Air/Land Support Wings” for support of Army and Marine operations; but they do not have bombers.

An Air Force flying wing typically contains 3,000 to 5,000 people. It is organized into an operations group, that includes flying or operational squadrons; a maintenance group that supports the operational flying mission with aircraft maintenance; a mission support group that includes transportation and supply squadrons, CE, security forces, and other support functions; and a medical group (See Figure III-4).

Typical Wing Organization

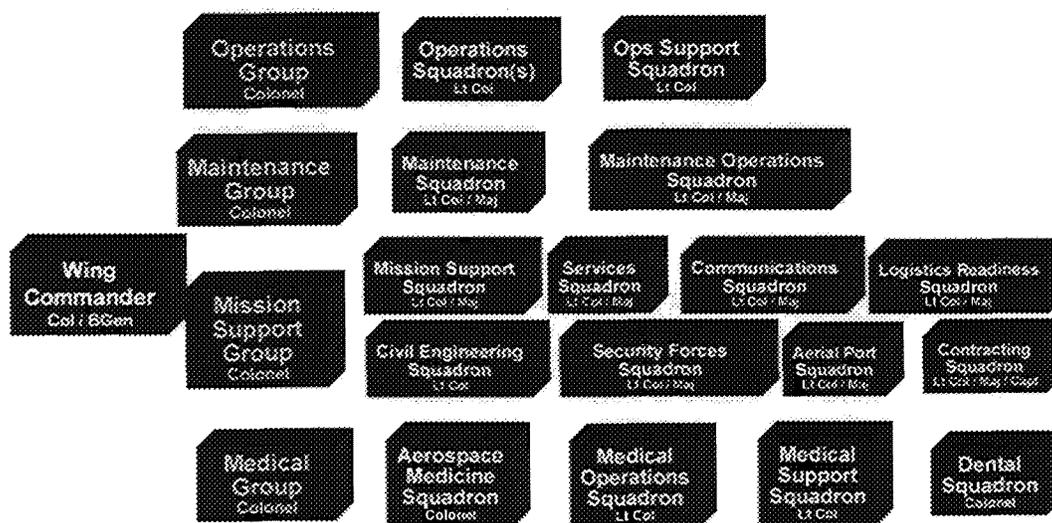


Figure III-4

The flying or “operations” squadron is considered the primary warfighting organization for the Air Force. It varies greatly in size, depending on the assigned aircraft. Separate maintenance squadrons support the ops squadrons. Squadrons will often deploy separately to support a particular commitment. If required, the wing will provide added infrastructure to support the ops squadrons from the other groups. This allows each operations squadron to operate as an independent unit.

Air and Space Expeditionary Force (AEF)

The Air Force established the Air and Space Expeditionary Force (AEF) concept as a means to provide forces and support on a rotational, and thus relatively more predictable basis. These AEFs, however, only provide a source of readily trained operational and support forces. Because they do not provide for a commander (specifically, a COMAFFOR) or the necessary command mechanisms (AOC and A-Staff), they, by themselves, are not discrete, employable entities.

Elements of AEFs will fall in on in-theater command structures, which are usually provided by regional NAFs, and may link up with in-theater Air Force forces. Thus, while AEF forces may deploy, they will stand up as part of an AETF, not as their own warfighting entity. In short, the AEF is the mechanism for managing and scheduling forces for expeditionary use; the AETF is the A.F. warfighting organization presented to a joint force commander (JFC).

The AEFs are divided into five pairs. All five pairs of AEFs rotate through a 15-month cycle, which is divided into five 90-day periods. During each 90-day period, a different pair of AEFs is vulnerable to deployment. Each standard AEF has a lead combat wing, plus various active duty, ANG, and AFRC Combat Air Forces (CAF) units tasked to support. The Air Force Vision says that “we will be able to deploy an AEF in 48 hours, and we will be able to rapidly deploy additional AEFs--up to 5 AEFs in 15 days.”

Listed below are the notional AEF capabilities.

Notional AEF

| <i>Forward Deployed</i> | <i>Capabilities</i> | <i>On Call</i> |
|-------------------------|---------------------|----------------|
| 18 x F-15C | Air-to-Air | 6 |
| 10 x F-15E | PGM | 14 |
| 8 x F-16CJ | SEAD | 10 |
| 12 x A-10 (6 Units) | Anti-Armor/CAS | 14 (ANG)* |
| 3 x E-3 | Surveillance/C2 | 0 |
| 3 x HH-60 | CSAR | 9 |
| 8 x C-130 (2 Units) | Intra-Theater | 10 (ANG)* |
| 4 x KC-10 | Air Refueling | 2 |
| 3 x KC-135 (2 Units) | Air Refueling | 7 (AFRC)* |
| 3 x KC-135 (2 Units) | Air Refueling | 7 (ANG)* |
| 3 x C-21A | Transportation | 6 |
| 0 x B-52/B-1 | CALCM/SA | 6 |
| 0 x B-2 | Stealth | 3 |
| 0 x F-117 | Stealth | 6 |

| | | |
|--|-----------|-----|
| 75 | 175 Total | 100 |
| <i>High Demand/Low Density Assets Tasked A/R</i> E-3, E-8, U-2, EC-130, RC-135, CSAR, Ground Systems (GTACS) | | |

* Additional aircraft may be available with Presidential Selective Reserve Call-up

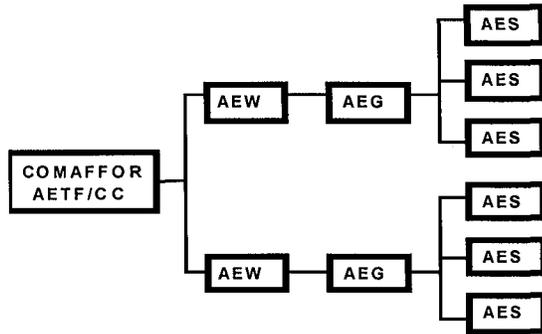
Air and Space Expeditionary Task Force (AETF)

The Air and Space Expeditionary Task Force (AETF) is the organizational structure for Air Force forces afield. The AETF presents a JFC with a task-organized, integrated package with the appropriate balance of force, sustainment, control, and force protection. Regardless of the size of the Air Force element, it will be organized along the lines of an AETF. While the task force model itself is not new, its emphasis within the Air Force is recent. The AETF presents a scalable, tailorable organization with three elements: a single commander, embodied in the Commander of Air Force Forces (COMAFFOR); appropriate command and control mechanisms; and tailored and fully supported forces.

The AETF is the Air Force warfighting organization. The Air Force has also begun organizing and training from a capabilities-based core of task force competencies (Global Strike, Global Mobility, Global Response, Homeland Security, etc.) that can be used alone, or in combination, to support a JFC request. Figure III-5 shows a typical AETF structure. Air Expeditionary Wings (AEW) and Air Expeditionary Squadrons (AES) support the AETF.

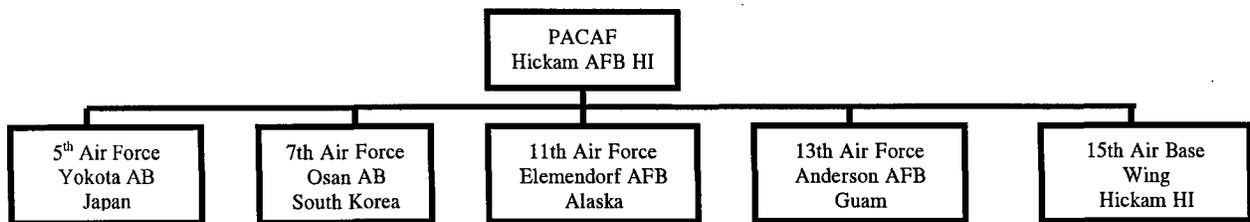
Typical Air and Space Expeditionary Task Force (AETF) Organization

FIGURE III-5



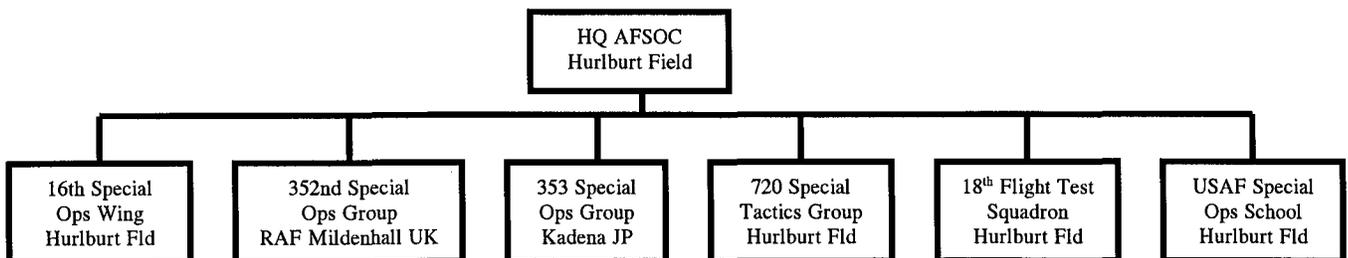
Now that we understand service componentcy and AEF and AETF concepts, let's return to our discussion on the MAJCOMs. The following is a brief description of each MAJCOM and its command and control structure.

Pacific Air Forces Headquarters, Hickam AFB, Hawaii



PACAF is PACOM's service component and is geographically defined. As such, PACAF supports the air functions required by PACOM. It is responsible for planning, conducting, and coordinating offensive and defensive air operations in the Pacific and Asian theaters. They also organize, train, equip, and maintain resources to conduct air operations. Force structure consists of 7 wings (two mult-missions, three fighters, one airlift, and one air base).

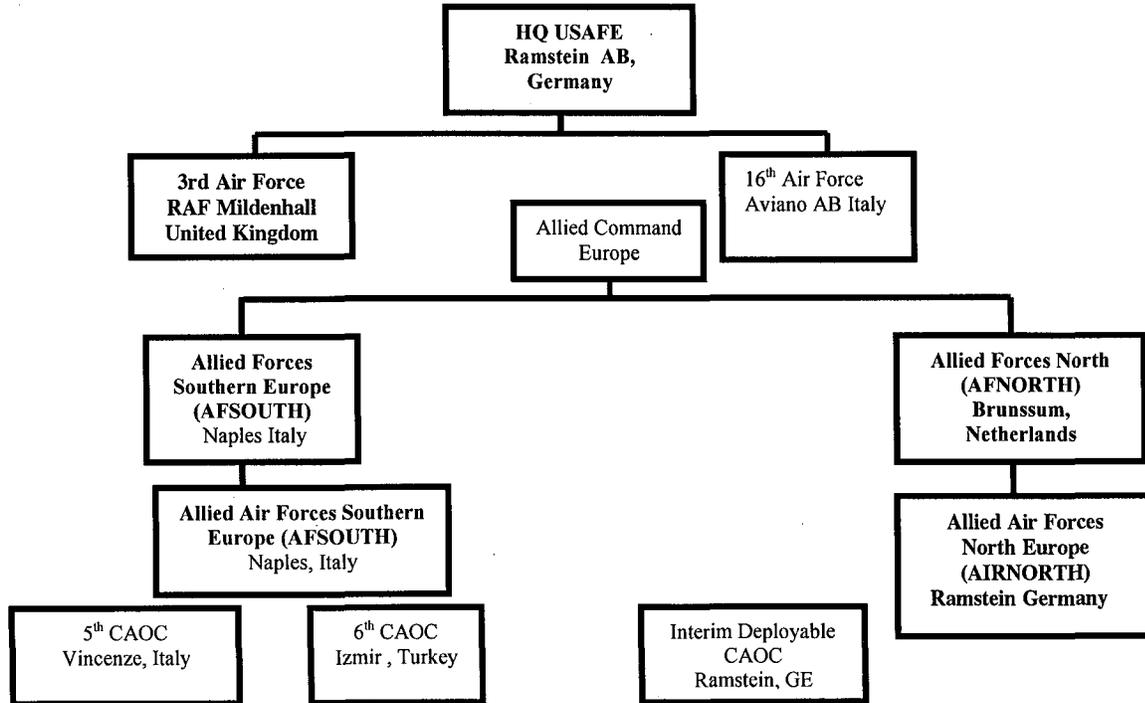
Air Force Special Operations Command Headquarters, Hurlburt Field FL



AFSOC is a component of SOCOM and is by far the smallest of the MAJCOMs. AFSOC can support counterair, counterland, countersea, counterspace operations, interdiction operations, and special airlift operations. It is responsible for providing specialized air support critical for

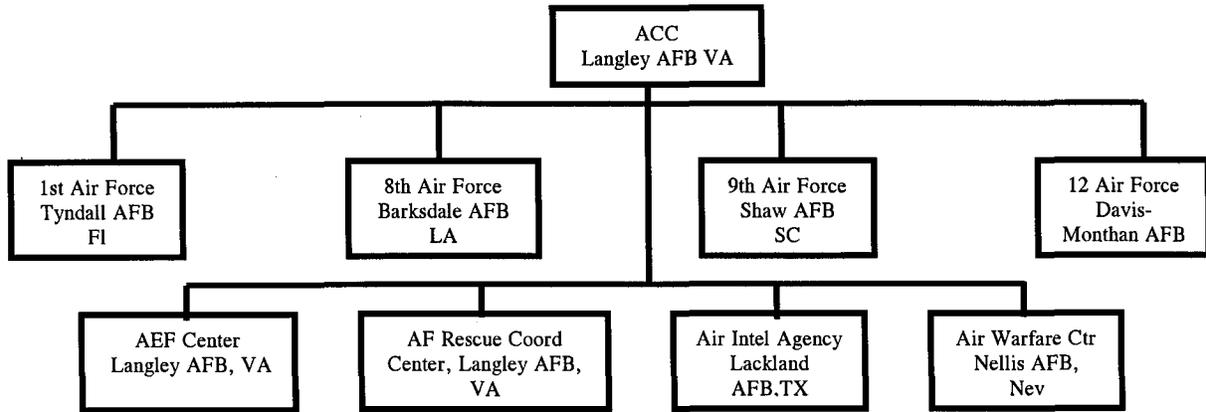
special operations forces. AFSOC will be discussed in greater detail in the special operations portion of this handbook.

US Air Forces in Europe
Headquarters, Ramstein AB, Germany



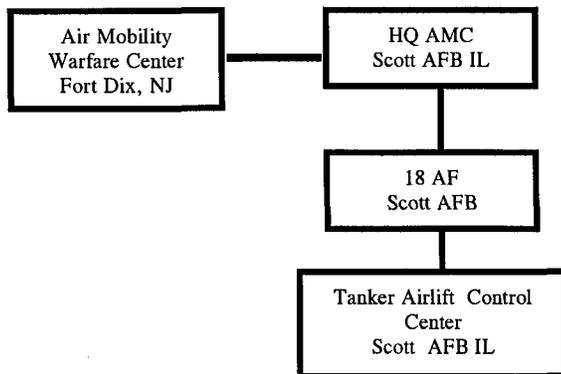
USAFE is EUCOM's service component and is geographically defined. USAFE is responsible for planning, conducting, controlling, coordinating, and supporting air and space operations to achieve US and NATO objectives based on tasking assigned by CDREUCOM. USAFE shares common systems, procedures, and training with NATO forces. Headquarters USAFE is collocated with Headquarters, Allied Air Forces North Europe. Its force structure includes seven wings--one air refueling, one airlift, three fighters, one air base, and one multimission. USAFE does not have bomber forces assigned. As the operational air component of EUCOM, USAFE's typical tasks include counterair, counterland countersea, counterspace, strategic attack, Airlift, Air Refueling, Electronic Combat, Surveillance and Reconnaissance, Base Operability and Defense, Logistics Support and Combat Support missions.

Air Combat Command
Headquarters, Langley AFB, VA.



ACC is the service component of JFCOM, NORTHCOM, and STRATCOM and supports all Air Force requirements. ACC acts as the primary provider of combat air forces and is the proponent for fighter, bomber, reconnaissance, combat delivery, battle management, and rescue aircraft, and for command, control, communications, and intelligence systems. As a force provider, ACC organizes, trains, equips, and maintains combat ready forces for rapid deployment and employment to the unified commands. The force structure consists of four numbered air forces. As a force provider to several COCOMs, ACC's typical tasks include counterair, counterland, countersea counterspace, strategic attack, electronic Combat, Surveillance and Reconnaissance, Base Operability and Defense, Logistics Support and Combat Support Missions.

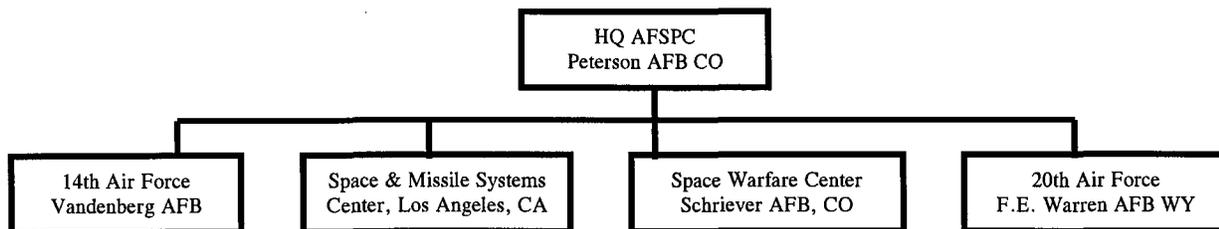
Air Mobility Command
Headquarters, Scott AFB, Ill.



AMC is a component of TRANSCOM and as such it is the impetus behind our rapid global mobility capability, providing airlift, aerial refueling, and aeromedical evacuation for US armed forces and theater commanders. AMC's typical tasks include strategic airlift and strategic air refueling in support of force mobility worldwide. Additionally, AMC assets can perform base operability and defense tasks as well as the combat support tasks. Its force structure consists of four Air Refueling Wings, two Air Mobility Wings, six Airlift Wings, two Airlift Groups and one Air Refueling Group. The command's Tanker Airlift Control Center schedules and controls

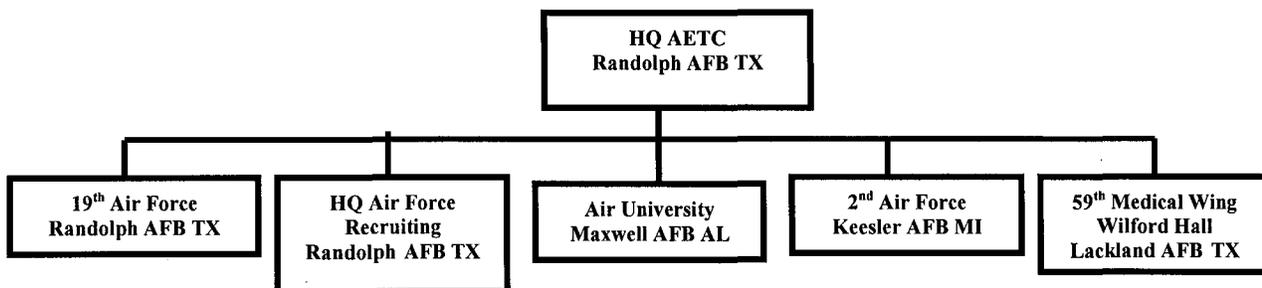
all tanker and airlift operations worldwide for both DOD and USAF. The AMC commander is currently dual-hatted as CDRTRANSCOM.

Air Force Space Command
Headquarters, Peterson AFB, CO



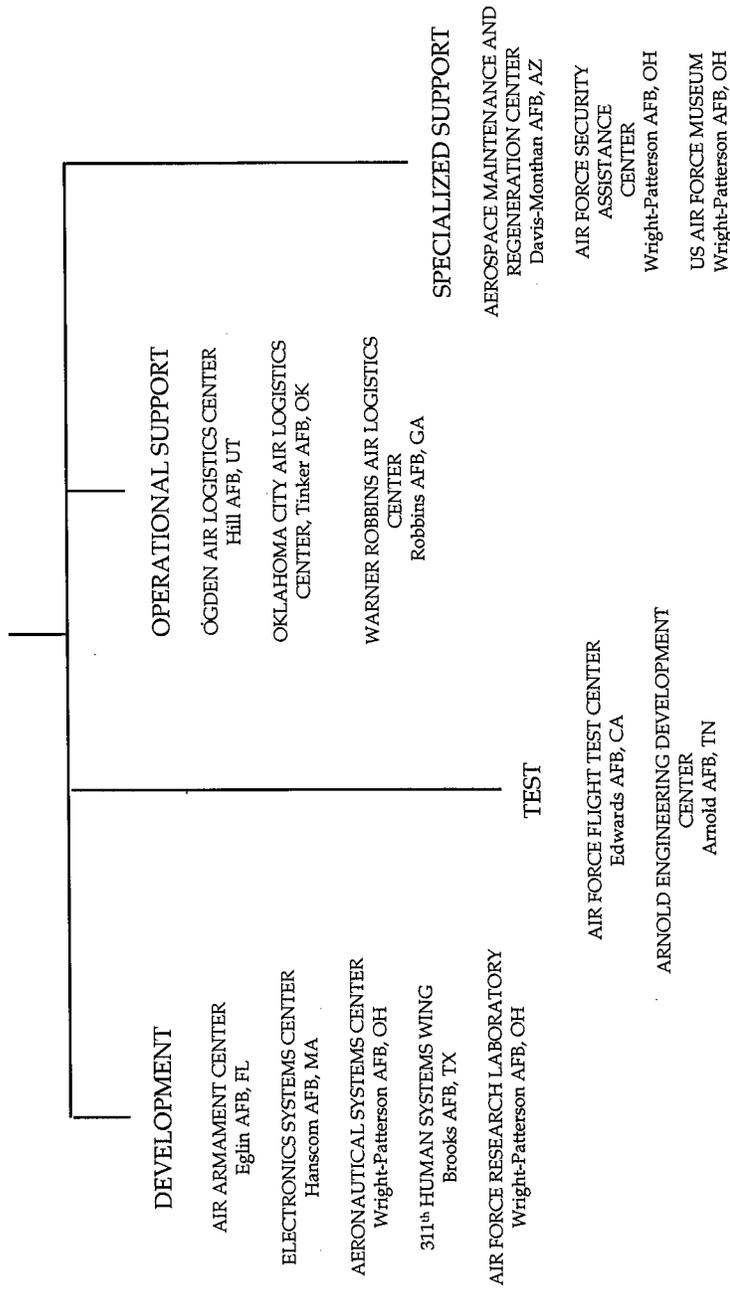
AFSPC is the component of USSTRATCOM (ICBM's). AFSPC operates, trains and equips USAF ICBM forces, which is its direct combat function. Additionally, it operates ground-based missile warning radars, sensors, and satellites, national space-launch facilities and operational boosters, worldwide space surveillance radars and optical systems; provides command control for DOD satellites, and provides ballistic missile warning to NORAD and NORTHCOM. The Air Force Space Warfare Center provides Air Force Space Support Teams, which teach warfighters regarding leading/cutting edge application of space resources and capability. The command force structure consists of seven Space Wings, and one Air Base Wing.

Air Education and Training Command
Headquarters, Randolph AFB, Tex.



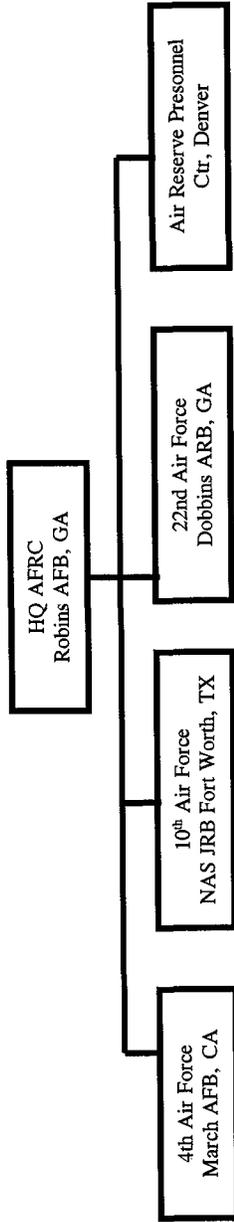
AETC's is responsible for recruiting, and training USAF enlisted and officer personnel; providing basic military training, initial and advanced technical training, officer training, and flying training; and provide military graduate and professional continuing education for officers, enlisted and civilians. Its force structure includes three DRUs, one Medical Wing, Air University and sixteen flying wings.

Air Force Materiel Command
Headquarters, Wright-Patterson AFB, Ohio



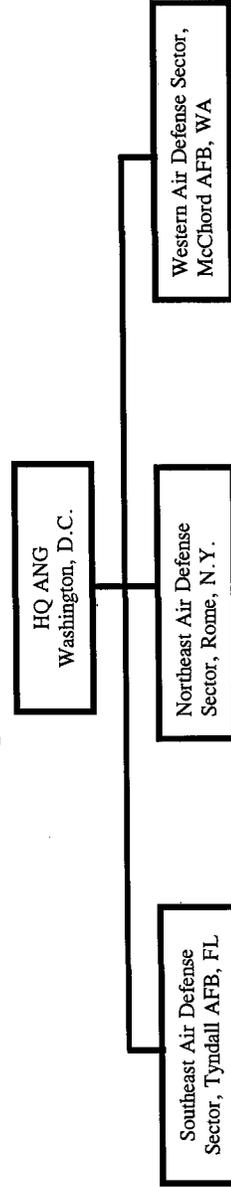
AFMC manages the integrated research, development, test acquisition, and sustainment of weapon systems; produces and acquires advanced systems; operates "superlabs," major production centers, logistics centers, and test centers; and the USAF Test Pilot School. Its force structure includes four product centers, two Test Centers, five Logistics Centers, two specialized Centers and one laboratory. AMC also supports *all Air Force functions*, by providing technical and special expertise and training and equipment for all functions. Provides mobile teams of technical expertise and depot level maintenance to theaters of operations.

Air Force Reserve Command
Headquarters, Robins AFB, GA



Organized to provide trained units and individuals to accomplish assigned taskings in support of national objectives, Air Force Reserve Command is the newest Air Force Organization. Its primary responsibilities include airlift and refueling duties; however, it includes functional mission support units (aerial port operations, civil engineer, security forces, intelligence, military training, communications, mobility support, combat logistics support, transportation and services. Force structure consists of 35 wings, five groups, and 76,680 personnel assigned to the reserves.

Air National Guard
Headquarters, Washington, D.C.



Provides trained units and individuals in support of national military objectives, as a full partner in the Total Air Force. Supports state governors by providing equipment and trained individuals to help preserve peace, order, and public safety. Force structure consists of 90 wings and 112,000 personnel.

CHAPTER 3

UNITED STATES NAVY

I. The United States Navy – Sea Power 21

The Navy plays a pivotal role in supporting our national interests and the objectives as defined by the *National Security Strategy* and *National Military Strategy*. Naval forces present a unique range of options to the National Security Council (NSC) and provide the joint force commander a full range of land and sea-based military options flexibly tailored for peacetime missions, crisis response, or conflict. Naval forces are adaptive forces for uncertain times. Overall, naval forces provide our nation with a rapid response force: persuasive in peace, compelling in crisis, and capable throughout the full range of conflict.

Naval forces protect our nation's global interests — most of which reside within the littorals. Forward deployed, self-sustaining, expeditionary and adaptive in nature, they are the preeminent force for deterrence and conflict prevention, and they are able to bring sustained, decisive force to bear when required. An integral part of our joint capabilities, the Navy guarantees maritime superiority and provides the sea-control, strategic-sealift, and forcible-entry capabilities essential to attaining dominant maneuver by joint forces. The Navy vision, Sea Power 21, is built upon the concepts of Sea Strike, Sea Shield and Sea Basing. These concepts, described further in Section II, are enabled via the FORCEnet utilizing our advances in technology, sharing of information and speed of communications. Naval forces make critical contributions during all phases of conflict, to include: maritime, air, and information superiority, Maritime Prepositioning Force, and amphibious operations; precise naval fires for fire support, interdiction, and strike; Special Forces operations; and crucial sea-based logistics. This wide range of missions demonstrates our capabilities in every aspect of war.

II. Concept of Operations - A Force in Readiness

In *peacetime*, we position the wide range of capabilities inherent in naval expeditionary forces where they are readily available for any contingency. Operating in international waters, our forces are sovereign extensions of our nation, free of the political constraints that can hamper land-based forces. Forward-deployed naval forces rapidly bring a wide range of capabilities to bear in crisis response operations. Naval *deterrence and crisis-response* operations prevent aggressors from achieving a *fait accompli*. Having combat-credible naval forces on scene shapes the battlespace and demonstrates our capability to halt aggression early in a conflict, well before the aggressor can achieve his objectives. In conflict, we are an integral part of joint operations to *fight and win*. Forward-deployed navy forces are critical for *enabling the joint campaign*. We ensure access to the theater for forces surging from the United States by seizing or defending shore bases for land-based forces, and by extending our defensive systems over early-arriving U.S. joint forces ashore. We lead early efforts to gain air superiority and take the war to the enemy by initially taking charge of the joint air battle as afloat Joint Force Air Component Commander. Navy expeditionary operations complement, enable and dramatically enhance the effectiveness of continental power-projection forces when a larger military response is needed.

The Naval Operating Concept for Joint Operations clearly defines the Navy (Sea Power 21) and Marine Corps (Marine Corps Strategy 21) service visions as they apply to the Department of the Navy's Naval Power 21. Sea Power 21 is built upon the concepts of Sea Strike, Sea Shield and Sea Basing.

| CONCEPT | DESCRIPTION |
|------------|--|
| Sea Strike | Projecting precise and persistent Naval offensive power. It describes how 21 st century Naval Forces will exert direct, decisive and sustained influence in joint campaigns through the application of persistent intelligence, surveillance, and reconnaissance (ISR), time-sensitive strike, Ship-to-Objective Maneuver (STOM), and information operations (IO) to deliver accurate and devastating combat power. |
| Sea Shield | The manner in which Naval Forces will protect our national interests with layered global defensive power. It is based on our sustained forward presence, and on our abilities to dominate the seas and to provide distributed and networked intelligence to enhance homeland defense, assure access to the contested littorals, and project defensive power deep inland. |
| Sea Basing | The foundation from which offensive and defensive power are projected, making Sea Strike and Sea Shield realities. It describes the projection, sustainment, and operational maneuver of sovereign, distributed, and networked forces operating globally from the sea. Sea Basing will provide the Joint Force Commander with global command and control (C2) capability and extend integrated support to the other Services. |

* As defined in the Naval Operating Concept for Joint Operations

A. Key Operational Capabilities include:

Battlespace Dominance: Control of the sea, air and land environment where we conduct operations. Control means ensuring effective transition from open ocean to littoral areas, and from sea to land and back, to accomplish the full range of potential missions. Our ability to shape the battlespace well before a joint campaign commences is vital because even small changes in the early stages of a conflict can have a major impact on its outcome.

Power Projection: To apply combat power ashore as required. For forward-deployed naval forces, the littorals are a starting point as well as a destination. Tactically, the distance we reach inland from the sea depends on terrain and weather, the contributions of joint and coalition forces, the potential adversary's capabilities, and the nature of our mission.

Strategic Deterrence: A mobile and survivable nuclear force; a critical leg of our nation's strategic triad. Ballistic missile submarine (SSBN) deterrence patrols are an essential element of U.S. strategy for deterring a wide range of potential threats. SSBNs are central to U.S. nuclear strategy due to their stealth and survivability, the reliability and security of their command and control systems, and the accuracy and flexibility of their weapons.

Force Sustainment: The ability to move by sea those forces and supplies required to support our national policies and objectives. As we have always done, we keep the vital seaborne logistics pipeline flowing throughout the joint campaign. During the 1991 Gulf War and Operation Iraqi Freedom, more than 95 percent of all material, supplies, and equipment sent to the theater went by sea. We protect strategic sealift and afloat prepositioning ships and logistics facilities critical for large-scale joint operations.

Command, Control and Surveillance: Capabilities to promote efficient joint and combined operations; exploitation of information systems to provide commanders with immediate intelligence. We provide highly capable afloat command and control capabilities to launch initial combat operations without delay. For example, we lead early efforts to gain air superiority and take the war to the enemy by initially taking charge of the joint air battle as afloat Joint Force Air Component Commander. Our forward-deployed fleet flagships and carriers can provide fully equipped afloat command centers for the Commander Joint Task Force. As an example, USS MOUNT WHITNEY served as afloat JTF headquarters in Operation Restore/Uphold Democracy in Haiti and again in JTF Horn of Africa (HOA). Our afloat systems allow joint forces deploying from the continental United States to "plug" into on-scene networked command and control systems.

Fundamental Warfare Tasks:

Air warfare (air defense/air superiority)

Sea combat (surface warfare/undersea warfare/maritime superiority)

Mine warfare

Coastal warfare

Command and control warfare

Strike warfare

Special warfare

Supporting Warfare Tasks:

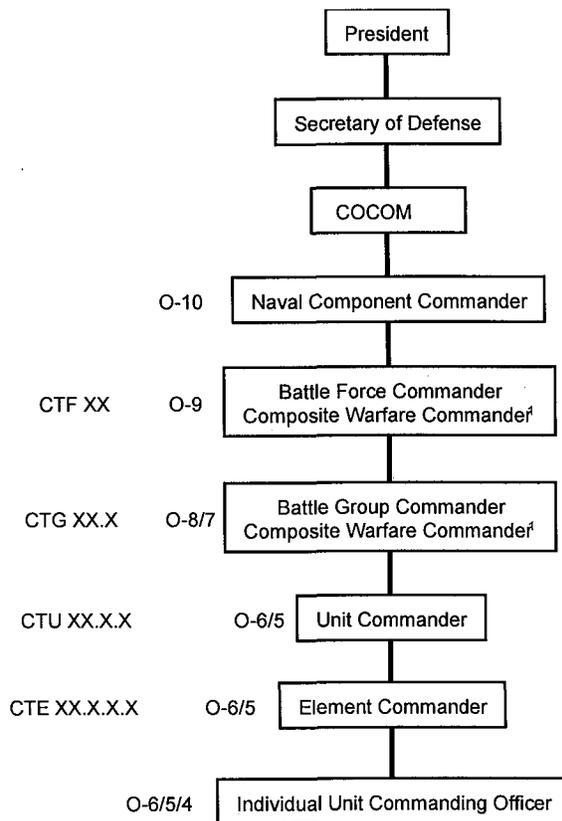
Surveillance

Intelligence

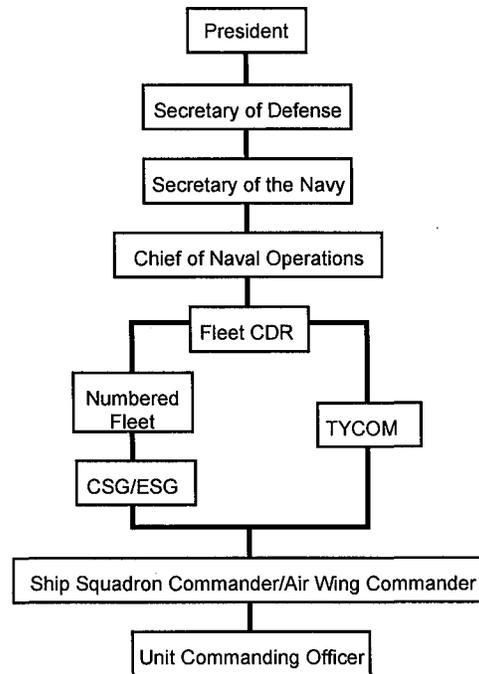
Logistics and Sustainment

III. Organization

Operational



Administrative

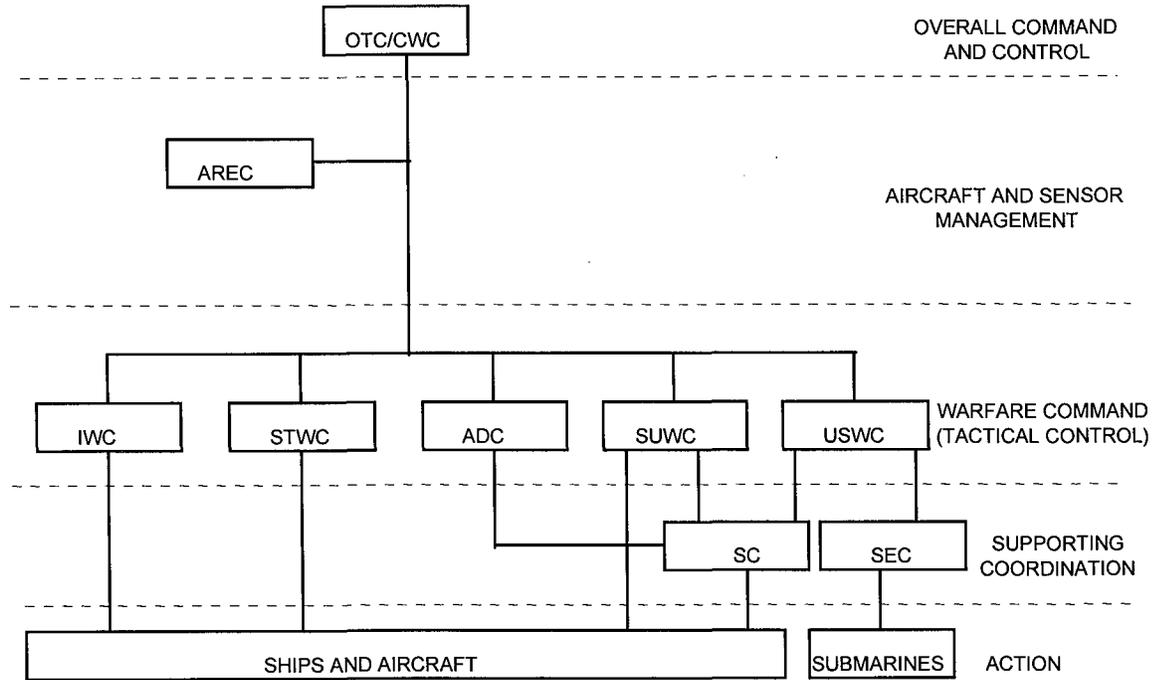


Note 1: CWC level of command is contingent upon size of battle force/group involved. See Appendix for details.

| | |
|---|--|
| <p>Numbered Fleets: 2nd Fleet (East Coast) 6th Fleet (Mediterranean) 3rd Fleet (West Coast) 5th Fleet (Southwest Asia) 7th Fleet (Western Pacific) (Even = East; Odd = West)</p> | <p>Fleet/Naval Component Commanders: COMLANTFLT (COMUSFLTFORCOM) COMPACFLT COMUSNAVEUR COMUSNAVCENT</p> |
|---|--|

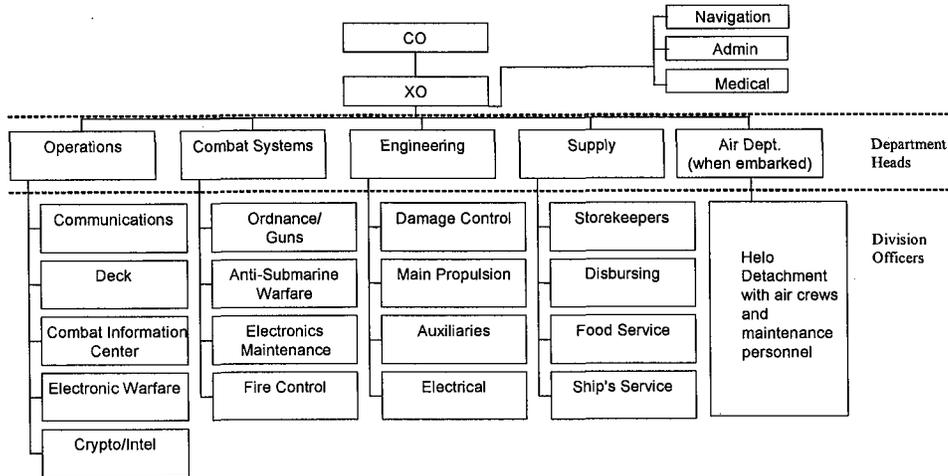
A. Navy Composite Warfare Commander (CWC) Concept. Because of the complexities of command and control in modern naval warfare, the Navy uses the "Composite Warfare Commander" concept within a task organization. Under this architecture, the Officer in Tactical Command (OTC) may delegate command authority in particular warfare areas to subordinate commanders within his organization. Although he may not delegate control of the

offensive mission objectives, he could possibly delegate overall coordination of defensive warfare areas to a CWC, although this is very rare. Thus, the terms CWC and OTC may, in certain circumstances, be interchangeable. Subordinates to the CWC are five principal warfare commanders: the air defense commander (ADC), the strike warfare commander (STWC), the surface warfare commander (SUWC), the information warfare commander (IWC), and the undersea warfare commander (USWC). The OTC can retain direct command in any one or more warfare areas if desired. The warfare commanders are responsible for collecting, evaluating, disseminating tactical information and, at the discretion of the CWC, are delegated authority to respond to threats with assigned forces. If the warfare commanders are delegated authority to respond to threats in accordance with the rules-of-engagement (ROE), the CWC can still exercise control via "command by negation." Supporting the CWC and the warfare commanders are the submarine element coordinator (SEC), a cell of the USWC staff, who, when assigned, is responsible for coordinating the actions of support submarines; the screen coordinator (SC) responsible to the USWC, SUWC, and AWC for coordinating ships in the screen; the air element coordinator (AREC), who is responsible for managing and coordinating the distribution of aircraft and keeping the CWC and other warfare commanders and coordinators apprised of air operations. The supporting coordinators differ from the warfare commanders in one very important respect. When authorized by the CWC, the warfare commanders have tactical control of resources assigned and may autonomously initiate action. The supporting coordinators execute policy, but do not initiate autonomous actions.



REF: NWP 3-56 (A)

B. Shipboard Organization: The figure below shows a generic shipboard organization for a small or medium-sized ship. Larger ships (CVN, LHD, LHA, etc) will have additional departments. Destroyer/submarine tenders have large and robust repair departments, and larger amphibious ships (and carriers) have robust medical/dental departments. Supply ships have large supply and deck departments to facilitate the on-load, inventory, storage, handling, transfer and off-load of stores, ammunition and POL.



C. Organization for Combat. Generally, operational naval forces are grouped into *Fleets, Forces, Groups, Units, and Elements*. The size and make-up of the organization is dependent upon its mission (task-organized). Some common Naval organizations for combat are:

Expeditionary Strike Group (ESG). An Expeditionary Strike Group is comprised of a “traditional” Amphibious Ready Group (ARG) (1 LHA/LHD plus 2 other LSD/LPD) which has been augmented with strike capable surface combatants (2-3) and a submarine and/or land based VP support. The ESG, with the traditional roles and missions of the ARG, now has a more robust warfare capability in all areas. A MEU(SOC) will still typically be embarked.

Amphibious Task Force (ATF). An amphibious task force is a group of 8 – 15 amphibious ships carrying a landing force (or a MEB), to an amphibious landing; following the landing, it provides support to the landing force ashore. The task force includes multiple large deck amphibs (LHD/LHA) with USMC helicopters and AV-8B Harrier VSTOL aircraft, both of which are trained for and used in the support of ground forces ashore. During Operation Iraqi Freedom, ATF’s sailed from the east and west coast of the US (ATF-East and ATF-West).

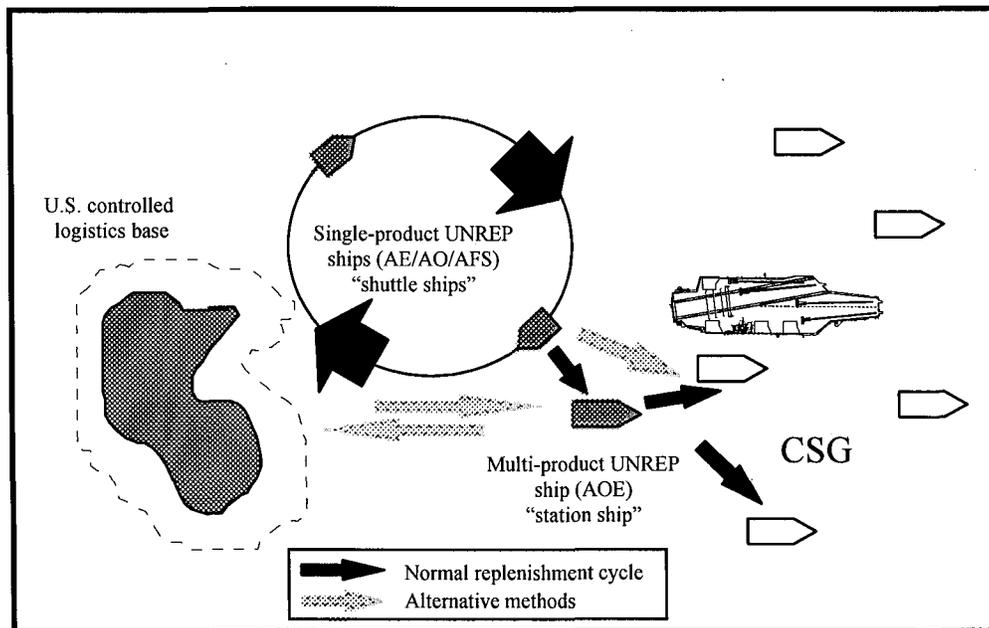
Carrier Strike Group (CSG). A CSG has significant combat flexibility through the employment of its carrier air wing, surface combatants and support submarines. As such, the CSG has a robust offensive and defensive capability in all warfare mission areas, with the possible exception of mine countermeasure warfare. Although the carrier's self-defense capability (exclusive of the air wing) is limited to point defense systems such as the NATO Sea

Sparrow Missile System (NSSMS) or Rolling Airframe Missile (RAM), Close-in Weapon System (CIWS) and various ECM/ECCM systems, the composition of the CSG (and its subsequent tactical or theater disposition) is designed to take into account the strengths and limitations of all the various platforms (air, surface, subsurface and maritime patrol aircraft (MPA), if available). The combined effect of all individual units working as a team provides the necessary offensive and defensive capabilities to accomplish nearly any maritime mission. The typical CSG is composed of 1 CV/CVN; a carrier air wing capable of supporting a sustained rate of 85 strike sorties per day (109 total sorties per day) and a 3 - 5 day surge rate of 134 strike sorties per day (166 total sorties per day); 3-5 surface combatants (CGs/DDGs/FFGs, of which at least 2 are AEGIS-capable and are VLS-Tomahawk capable, and which carry an aggregate of 6 - 8 LAMPS helicopters); 2 SSNs and 1 multi-purpose AOE.

Expeditionary Strike Force: The ESF provides a robust, unobtrusive forward presence that may be intensified or withdrawn as required on short notice. The ESF, which can act alone or as an enabling force in the littoral region, combines the power projection capabilities of the Carrier Strike Group (CSG) and the Expeditionary Strike Group (ESG). A ESF is commonly considered to consist of one CSG, one ESG with MEU (SOC) embarked, and may also include mine countermeasures ships.

Surface Strike Groups/Missile Defense -Surface Action Group (SSG/M-D SAG). The SSG or M-D SAG is a naval formation of combatant ships (3-4) which does not include an aircraft carrier. It is organized with cruisers (CGs), guided missile destroyers (DDGs), and/or guided missile frigates (FFGs). Although it lacks organic fixed-wing capability for air and maritime supremacy operations, it has ASW helicopters aboard several ships for screening, targeting, and surveillance. SSG/M-D SAGs vary in the number and type of ships assigned, depending on the mission, but will generally contain both Aegis and Tomahawk vertical launch capability.

D. Underway Replenishment (UNREP) Operations. Navy supply ships carry the fuel, provisions, ammunition and repair parts to continually sustain deployed Naval combat forces while underway. Most replenishment cycles involve single-product ships (AOs/AEs/AFSSs) acting as shuttles between shore logistics support sites and multiproduct ships (AOEs), which consolidate large quantities of fuel, provisions and parts and which are capable of keeping up with a CSG during high-speed transits. Single-product ships, while capable of performing UNREP with combat units, cannot keep pace with a transiting CSG. Conversely, multiproduct ships can act as the link between shore logistics points and forward-deployed units, but are not generally tasked to do so because of their much greater utility in remaining with the CSG. Even so, AOEs are frequently considered to be theater-level assets which are placed only under the TACON of the CSG or ESG commander, as there aren't enough of them to assign one permanently to each CSG and ESG, resulting occasionally in the need to "share". UNREP is accomplished by CONREP (connected replenishment, or the horizontal movement of supplies between ships) and VERTREP (vertical replenishment, done by helos). A CSG may require replenishment every 3-5 days (more frequently during periods of high sortie rates) to keep conventionally powered ship fuel inventories above 75%. Caught up in a continuous cycle of refueling and reloading, crew rest on logistics ships supporting a CSG may occur only during transit to and from rendezvous points.



IV. General Information

Deployment Cycles: In the past, CONUS-based ships and submarines (except SSBNs) operated on an 18-month deployment cycle. A ship would deploy for 6 months and, upon return to CONUS, begin a 12-month combined maintenance and training cycle to prepare for the next deployment. In general, most ships enter an extensive (1+ year) overhaul every 3 - 5 deployment cycles. At any given time, approximately 15 - 20% of the active fleet is in some form of extensive maintenance, which precludes operational tasking. Under the new Fleet Response Plan (FRP) begun in 2003, the Navy has changed the deployment cycle in order to gain flexibility and meet the ongoing demands of the GWOT. With the FRP, the Navy will constantly have the ability to quickly "surge" deploy up to six CSG's within 30 days, and an additional two CSG's within 90 days. Ships will return from deployment and, following maintenance periods, quickly complete the basic work up phase in order to be prepared to surge deploy on short notice. Over a period of months, the ship will continue with integrated strike group training but remain prepared to surge deploy. The ship will conduct refresher training leading up to a "scheduled deployment".

Naval Designations: When dealing with naval forces, one encounters a series of acronyms designating ship types. These letter designations for warships, adopted by the U.S. Navy around the turn of the century, have since been used worldwide as a universal shorthand for warship types. These designations (listed below) are used throughout this section.

| | | | |
|------|--|------|--|
| CVN | Carrier (nuclear-powered) | LHA | Amphibious Assault Ship |
| CV | Carrier (conventional power) | LHD | Amphibious Assault Ship (with dock) |
| CG | Missile Cruiser | LPD | Amphibious Transport Dock |
| DD | Destroyer | LSD | Landing Ship, Dock |
| DDG | Missile (anti-air) Destroyer | MCM | Mine Countermeasures Ship |
| FFG | Missile Frigate | MHC | Mine Hunter, Coastal |
| PC | Patrol Craft | AE | Ammunition Ship |
| SSN | Attack Submarine (nuclear) | T-AK | Auxiliary Cargo Ship |
| SSBN | Ballistic Missile Submarine (nuclear) | T-AO | Auxiliary Oiler |
| LCAC | Landing Craft Air Cushion | AOE | Fast Combat Support Ship |
| LCC | Amphibious Command Ship | AS | Submarine Tender |

Note: A T-Designation such as T-AE, T-AKS, T-AO, etc. denotes Naval Fleet Auxiliary force (NFAF) vessels, owned by the U.S. government and administered by the Military Sealift Command (MSC) with civil service merchant marine crews and embarked naval detachments.

Ship Information. Listed below in block format is a generic listing of the principle US Navy ship "classes". Please note that there may be differences in capabilities between ships in each class. A good reference is the "Fact File" tab on the Navy website: www.navy.mil.

A. Aircraft Carriers: The aircraft carrier is a multipurpose platform which carries various types of aircraft capable of conducting anti-air, strike, anti-surface, and anti-submarine warfare missions simultaneously. The carriers are capable of speeds over 30 kts and have substantial mission endurance (aviation fuel for up to 16 days of 24hr/day air operations). In addition to its offensive capabilities, the carrier's embarked air wing is also tasked with protecting the carrier and its escort ships, and has the ability to provide limited UNREP/VERTREP support to ships in company.

Carrier Air Wing (CVW). Typical wing composition on a carrier includes:

| | |
|--------------------------|-------------------------------------|
| VFA (Fighter/Attack) | 36-48 x FA-18 (HORNET) (3-4 Sqdns) |
| VAW (Early Warning) | 4 x E-2C (HAWKEYE) |
| VS (SUW/ASW) | 6-8 x S-3B (VIKING) |
| HS (ASW/CSAR) | 4 x SH-60F and 2 x HH-60H (SEAHAWK) |
| VAQ (Electronic Warfare) | 4 x EA-6B (PROWLER) |

Flight Deck Operations. The Carrier Air Wing Commander (CAG) performs major command functions in directing and administering the employment of embarked aviation squadrons. There are two common methods of organizing aircraft launches and recoveries. *Cyclic Operations* consist of several scheduled launch/recovery cycles per flight day. "A cycle" is normally 1.25 to 1.5 hours long, which enables 7-8 cycles (as many as 190 sorties) in a 12-hour flying day. Cyclic operations provide "predictability" for the flight deck and are sustainable indefinitely, but are inflexible. Aircraft cannot be easily launched or recovered outside of prescribed times because of resultant scheduling problems with fueling, rearming, and deck spotting evolutions for the next cycle. *Flexible Deck/Battle Flexible Deck Operations* mean that aircraft can land anytime, not just once per cycle. For warfare commanders, "Flex Deck" Operations mean greater flexibility to "get an aircraft now." The downside is that "Flex Deck" operations cannot be sustained indefinitely, usually no longer than

24 - 36 hours. Aircraft maintenance and flight deck crew rest requirements remain the controlling factors.

B. Surface Combatants. Surface ships are versatile platforms that can operate independently, in company with a carrier, amphibious or convoy forces. Missions include shore bombardment, blockade, screening, search and rescue, tracking, ELINT collection, tactical deception, surveillance, evacuation, harassment and putting forces ashore.

C. Submarines. The concept of technical superiority over numerical superiority was and still is the driving force in American submarine development. A number of Third World countries are acquiring modern state-of-the-art non-nuclear submarines. Countering this threat is the primary mission of U.S. nuclear attack submarines. Their other missions range from intelligence collection and Special Forces delivery to anti-ship and strike warfare. The Navy began construction of Seawolf class submarines in 1989. Seawolf is designed to be exceptionally quiet, fast, and well armed with advanced sensors. It is a multi-mission vessel, capable of deploying to forward ocean areas to search out and destroy enemy submarines and surface ships and to fire missiles in support of other forces.

D. Amphibious Warfare. Amphibious warships are uniquely designed to support the United States Marine Corps maneuver from the sea against defended positions and provide a rapid built-up of combat power ashore in the face of opposition. The United States maintains the largest and most capable amphibious force in the world. The amphibious component of the Expeditionary Strike Group (ESG) notionally consists of 3 amphibious ships with embarked Marine Expeditionary Unit (Special Operations Capable) of approximately 2,500 Marines, including its aviation combat element. The principle amphibious classes are:

E. Auxiliary Vessels. Auxiliary vessels sustain the fleet at sea. The typical combat ship will carry 30-90 days of supplies and 3-10 days of fuel before fuel state falls below 75% (trigger point for refueling), depending upon the size of the ship. Combat Logistics Force (CLF) Ships sustain the forward deployed ships on station by providing food, ammunition, fuel, and supplies. The combat logistics force consists of oilers (AO/T-AO), Combat Stores ships (AFS/T-AFS), ammunition ships (AE/T-AE), most of which now belong to the Military Sealift Command (MSC) but which are under Navy OPCON, and combination or multiproduct ships (AOE). Combat Support Ships provide invaluable repair services to ships in remote places of the world where adequate repair facilities are unavailable. This fleet includes tenders for in-theater, intermediate-level repair capability and salvage/tug vessels (ATF/ARS/ATS) which can safely remove damaged vessels from a war zone without having to give up a second combatant to provide towing services.

A number of Auxiliary vessels operate regularly under the auspices of the Naval Fleet Auxiliary Force. This fleet includes oilers (TAO) (11), combat stores ships (TAFS) (8), surveillance ships (TAGOS) (12), maritime prepositioning ships (TAK) (3 sqdns each carrying 30 days worth of equipment for one MEB equivalent), 2 hospital ships (T-AH) and fleet ocean tugs (TATF). Civilian crews mostly man these ships with a naval detachment embarked. The NFAF is government-owned, administered by MSC, with individual ships OPCON to the specific naval commander being supported.

F. Mine Countermeasures

Mine Warfare. Naval mines are cheap, reliable and easy to obtain. The "weapons that wait" can pose a significant threat to any military operation where the transportation and sustainability of forces in theater depends on sea lines of communication (SLOCs). Consider that 93% of the sustainment for all U.S. and coalition combat forces came by sea during Desert Shield/Storm. There are three types of mine countermeasures operations, each of which takes a long time:

Minehunting – methods to determine where (and just as important where not) the mines are located. Usually by SONAR or visual means.

Minesweeping – active measures to counter mines. Mines may be: contact, acoustic, magnetic, seismic, pressure or a combination thereof. Sweeping may result in the neutralization of some mines. Hazardous to platform and personnel require specialized training.

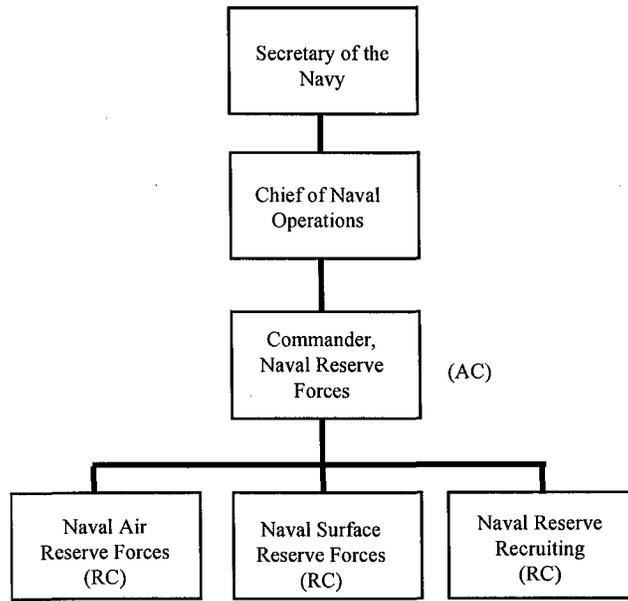
Mine neutralization – destruction of known mine(s). Accomplished by the AN/SLQ-48 submersible vehicle or Navy Mine Countermeasures Explosive Ordnance Disposal (EOD) teams.

V. Naval Reserve. The Naval Reserve is organized into two general types of units:

Commissioned Units: Reserve units, with organic equipment, such as aircraft squadrons, Naval Reserve Force (NRF) ships, cargo handling battalions, mobile inshore undersea warfare units, and mobile construction battalions. These units are tasked to deliver a complete operational entity to the operating force and are commanded by either Active or Reserve component officers and are staffed primarily by Selected Reserve Personnel. Naval Reserve Force ships are under operational control of the Atlantic and Pacific Fleet Commanders, while those designated as Reserve Frigate Training ships come under the operational control of Commander, Surface Group Six, who is assigned to Commander, Naval Reserve Force. 32 percent of Selected Reserve personnel are assigned to commissioned units.

Augmentation Units: Units that augment Active component units with trained personnel. Such units are tailored to augment designated ships, special warfare commands, intelligence staffs, etc. Their function is to allow for peak operations for an indefinite period of time. They also provide surge capability, and then can sustain a high level of activity to support deployed forces.

Roles, Missions, and Functions: The function of the Naval Reserve is to provide trained and qualified personnel and units to provide swift augmentation to the Navy. The Naval Reserve is composed of personnel in the Selected Reserve, the Individual Ready Reserve, and the Retired Reserve. The Selected Reserve is the primary source of units and personnel for immediate expansion of the Navy. The Naval Reserve is an integral part of the Navy's total capability across the full spectrum of conflict and is available for crisis response and contributory support.



VI. Our Course for the 21st Century

Sea Power 21 emphasizes that projecting influence and power ashore requires naval forces shaped for joint operations. *Joint Vision 2010* provides the template for joint combat operations in the 21st century and envisions future joint combat operations leveraging information superiority to execute dominant maneuver, precision engagement, full-dimensional protection, and focused logistics.

Naval forces will be able to provide sea-based overt and covert surveillance, reconnaissance, and information warfare capabilities for joint forces, and sea-based command and control up to the Commander Joint Task Force level. We will provide enhanced naval fires, force protection, command and control, surveillance and reconnaissance, and logistics support for Marines ashore — enabling the high-tempo operations envisioned by the Marine Corps' Operational Maneuver From The Sea. We will deliver precision naval fires fully integrated as an element of joint combat power. Building upon our already robust information, air and maritime superiority capabilities, we will provide integrated protection for joint and coalition forces. Naval defensive capabilities, such as theater air defense and ballistic missile defense, will be integrated with joint systems for maximum protection of the joint force. We will enhance the range, lethality and joint integration of our force-protection capabilities and enhance our ability to defeat sea-denial threats and dominate the littoral battlespace.

In late 2005, the CNO announced several new initiatives focused on new capabilities in the joint and combined war on terror. These include developing adaptive force packages and flexible deployment concepts drawn from naval forces (to include naval special warfare), U.S. Coast Guard forces, and coalition partners in support of operations in blue, green, and brown water

environments. Another initiative is the creation of a Navy Expeditionary Combat Command for stand-up of a battalion size force in FY-2007. Potential missions include Level III VBSS, Expanded Maritime Interdiction Operations, force protection, civil affairs and Theater Security Cooperation activities. Also planned is the creation of a Foreign Area Officer community in 2006. Few public details are available on these and related initiatives, but reflect the Navy's desire to continue to bring relevant and capable forces to the joint fight.

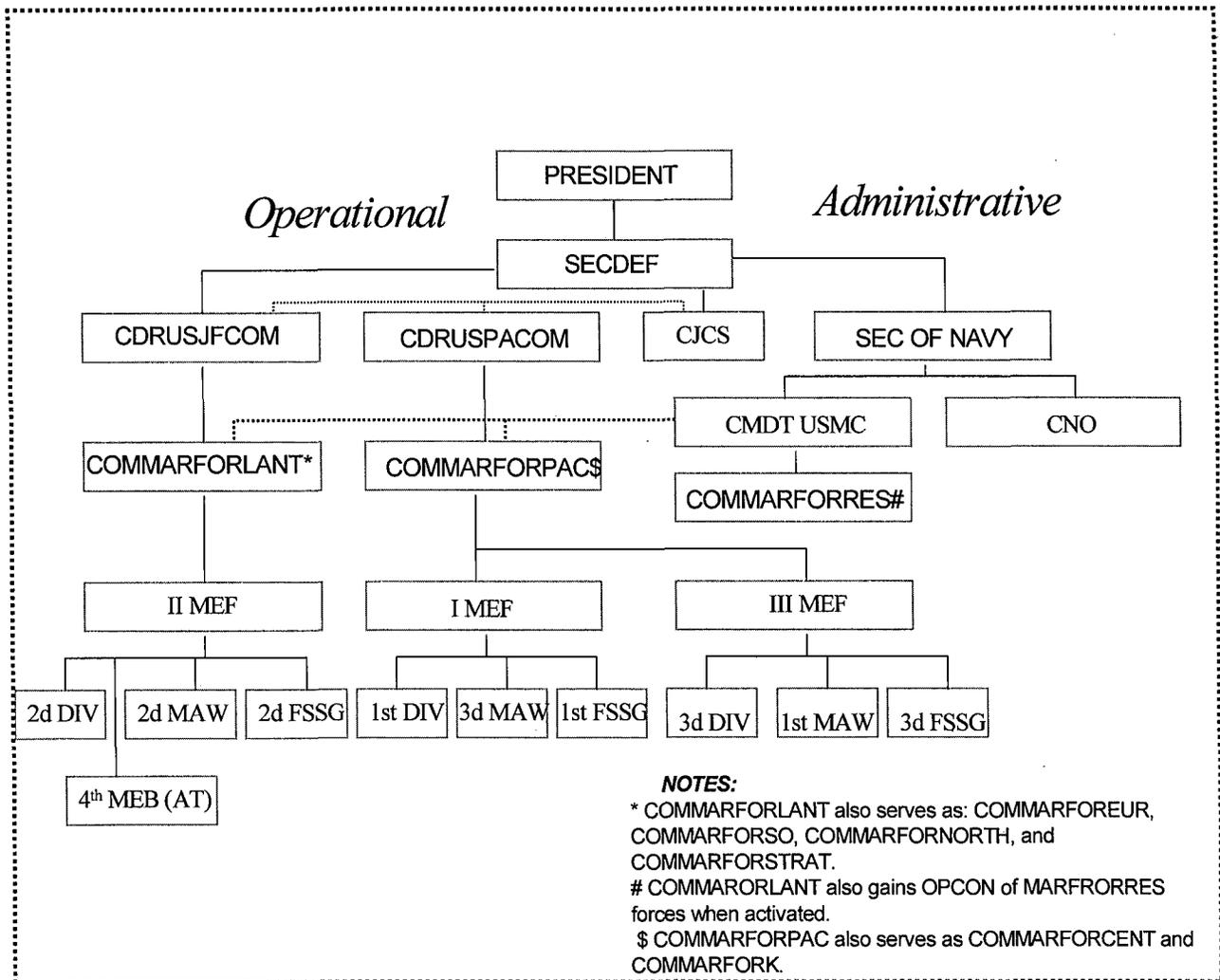
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CHAPTER 4

UNITED STATES MARINE CORPS

I. Organization

The Marine Corps is a separate Service within the Department of the Navy.

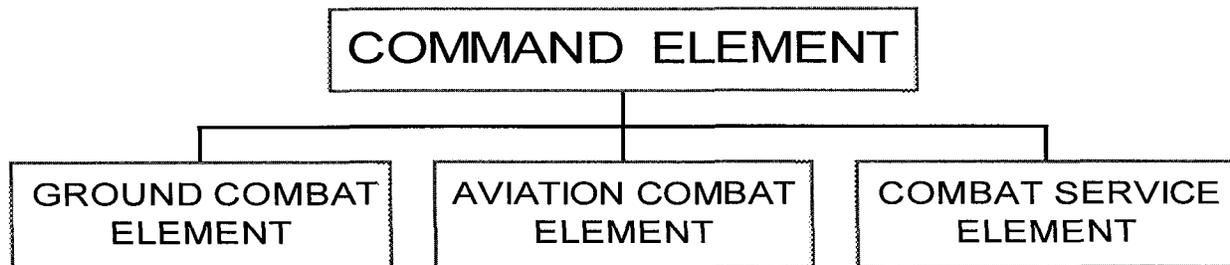


A. MAGTF Organization and Capabilities

Consistent with its statutory charter to "provide forces of combined arms, including aviation," the Marine Corps organizes for operations into Marine Air-Ground Task Forces (MAGTFs). Assigned a mission, Marine Component commanders organize appropriately tailored MAGTFs by drawing ground, aviation, and combat service support capabilities from the division, wing, and force service support group structure of the Fleet Marine Force.

MAGTFs provide the joint force commander with a readily available, self-sustaining, combined arms force capable of operating as the landing force of an amphibious task force; as a force in sustained operations ashore; as part of, or nucleus headquarters of, a joint or combined task force; as a forward presence in an area of interest; or as a single-service command capable of responding across the spectrum of conflict in all levels of war.

MAGTFs consist of four elements:



Command Element (CE). The CE is the MAGTF headquarters. As with all other elements of the MAGTF, it is task organized to provide the command, control and coordination essential for effective planning and execution of joint operations. Composed of: CO/CG plus staff and assets organic to the MEF Headquarters Group (MHG). These include Intelligence, Communications and Reconnaissance capabilities.

Ground Combat Element (GCE). The GCE is task organized to conduct ground operations to support the MAGTF mission. It is formed around an infantry organization reinforced with requisite artillery, reconnaissance, armor, and engineer forces and varies in size and composition from small teams to one or more Marine Divisions.

Aviation Combat Element (ACE). The ACE is task organized to provide for all (or a specific portion of the) Marine Corps aviation requirements based on the tactical situation and the MAGTF mission and size. Those functions include: air reconnaissance, anti-air warfare, assault support, offensive air support, electronic warfare, and control of aircraft and missiles. The aviation combat element is organized around an aviation headquarters and varies in size from a reinforced composite helicopter squadron to one or more Marine aircraft wing(s). It includes those aviation command (including air control agencies), combat, combat support, and combat service support units required by the situation.

Combat Service Support Element (CSSE). The MAGTF element that is task organized to provide the full range of combat service support necessary to accomplish the MAGTF mission. The combat service support element can provide supply, maintenance, transportation, deliberate engineer, health, postal, disbursing, prisoner of war, automated information systems, exchange, utilities, legal, and graves registration services. The combat service support element varies in size from a Marine Expeditionary Unit Service Support Group to a Force Service Support.

B. Types of MAGTFs

Regardless of size, all MAGTFs are "expeditionary" forces. An expeditionary force is a capability, vice a structure. Thus, any size MAGTF could be referred to as a Marine "expeditionary" force. However, to provide a frame of reference for general sizing, MAGTFs are categorized in the following four types:

- Marine Expeditionary Force (MEF)
- Marine Expeditionary Brigade (MEB)
- Marine Expeditionary Unit (MEU)
- Special Purpose MAGTF (SPMAGTF)

Marine Expeditionary Force (MEF). The Marine Expeditionary Force is the largest of the Marine air-ground task forces (20,000-90,000 personnel). The MEF is normally built around a division/wing team, but can include several divisions and aircraft wings, together with an appropriate combat service support organization. The MEF is capable of conducting a wide range of amphibious assault operations and sustained operations ashore. It can be tailored for a wide variety of combat missions in any geographic environment. It is capable of self-sustainment for a period of 60 days.

Marine Expeditionary Brigade (MEB). The Marine Expeditionary Brigade is formed from within the MEF, (3,000-20,000 personnel). It may be deployed independently or as the forward deployed element or fly-in echelon of the MEF. The MEB is normally task organized around a HQ element, a Regimental Landing Team, a Marine Aircraft Group, and a logistics support group. It is capable of conducting amphibious assault and other combat and MOOTW operations. During potential crisis situations, an entire MEB may be forward deployed aboard amphibious shipping for an extended period in order to provide an immediate combat response. The MEB personnel may also be deployed via strategic airlift to join with its equipment that is delivered via Maritime Prepositioning Ships (MPS). It is capable of self-sustainment for a period of 30 days. A MEB is fielded with assets from within the MEF with a commensurate reduction in MEF combat capability and C2.

Marine Expeditionary Unit (MEU). The MEU is normally composed of a reinforced infantry battalion, a composite helicopter squadron reinforced with fixed wing AV-8B aircraft (LHA or LHD only), and a MEU service support group, (1,500-3,000 personnel). MEUs are routinely deployed aboard Amphibious Ready Group (ARG) ships as an immediately ready sea-based MAGTF to meet forward presence and limited power projection requirements. These ARG/MEU deployments have become routine taskings involving standardized equipment and

capabilities. The forward-deployed MEU is task organized, trained, and equipped to conduct a wide variety of conventional and selected maritime special purpose missions. All forward-deployed MEUs have completed specialized training and evaluation and are designated as MEU (SOC) (Special Operation Capable). Currently, MARFORLANT and MARFORPAC each maintain one forward-deployed MEU (SOC) in critical regions and a third MEU (SOC) is forward deployed on a part-time basis in the Western Pacific. The MEU is commanded by a colonel and deploys with 15 days of accompanying supplies. Within each Maritime Prepositioning Squadron (MPSRON) a single ship is configured with stand-alone capability to support a MEU with equipment and supplies for operations in excess of 15 days. The addition of any single maritime prepositioning ship to a forward-deployed MEU(SOC) adds significant sustainment and the ability to rapidly expand the force. MEU(SOC) mission capabilities are:

- Amphibious raids/limited objective attacks (w/o electronic emissions, in dark, under adverse weather conditions, within 6 hr notice).
- NEO.
- Security Ops/counter Intel.
- Mobile training teams.
- SIGINT/electronic warfare Ops.
- Civic action Ops.
- Clandestine recon and surveillance Ops.
- Tactical recovery of aircraft and personnel.

Special Purpose MAGTF (SPMAGTF). MAGTFs organized to accomplish specialized missions for which another MAGTF would be inappropriate. SPMAGTFs fill the niche of providing Marine capabilities for special purposes such as disaster relief, unique instances such as an oil spill, or for engagement activities such as UNITAS in Latin America. They are also capable of limited combat operations such as noncombatant evacuations. Special purpose MAGTFs are designated as SPMAGTF with its location: e.g. SPMAGTF (Liberia) or SPMAGTF (Philippines). As with the MEU, the SPMAGTF may be the forward element of a larger MAGTF.

4th Marine Expeditionary Brigade (Anti-Terrorism). In response to events world events 4th MEB was organized to provide a unique rapid-response anti-terrorism capability to commanders worldwide. 4th MEB provides task organized forces and capabilities to deploy in support of MAGTFs, Joint or Combined Forces, or independent operations as required.

4th MEB (AT) Mission. To provide designated supported commanders with rapidly deployable, specially trained, and sustainable forces that are capable of detecting terrorism, conducting activities to deter terrorism, defending designated facilities against terrorism, and conducting initial incident response in the event of chemical, biological, radiological, or nuclear (CBRN) terrorist attacks, worldwide.

4th MEB (AT) Characteristics. 4th MEB (AT) provides supported commanders with a specialized antiterrorism force that possesses the following characteristics:

a. Economy of Force. 4th MEB (AT) task forces are organized and equipped to provide the supported commander with a highly effective antiterrorism capability within a relatively compact unit. These forces are not designed to operate across the full spectrum of infantry combat. They are tailored for the specific asymmetric terrorist threat. Their employment enhances the supported commander's ability to conduct full-spectrum combat operations in a high terrorist-threat environment.

b. Rapid Response. 4th MEB (AT) task forces are prepared to depart the point of origin within 12 hours.

4th MEB (AT) Core Capabilities. The 4th MEB (AT) provides two fundamental capabilities.

a. Antiterrorism Operations. These operations include all activities required to detect, deter, mitigate, and defend against terrorist attack.

b. Support Operations. These operations provide the supported commander with specific capabilities required to successfully execute his mission.

II. Concept of Operations

Amphibious, combined arms and expeditionary in nature, the United States Marine Corps is capable of conducting worldwide littoral stability operations; limited objective (forced entry) operations; amphibious operations and sustained operations ashore. USMC Doctrine is based on maneuver warfare. Expeditionary Maneuver Warfare (EMW) is the capstone concept that guides the way the Corps organizes trains and equips to deploy, employ and sustain its forces. EMW goes beyond traditional amphibious operations and two dimensional maneuver warfare by embracing the concepts of Operational Maneuver from the Sea (OMFTS), Ship-to-Objective maneuver (STOM), Sustained Ops Ashore (SOA) and Other Expeditionary Ops (EOA). EMW seeks to shatter enemy cohesion through a series of rapid, violent and unexpected actions. Operational mobility, surprise, speed and flexibility allows the Corps to pit their strengths against enemy weaknesses.

A. Amphibious Warfare

Amphibious Operations. An amphibious operation is a military operation launched from the sea by an amphibious force embarked in ships or craft with the primary purpose of introducing a landing force (LF) ashore to accomplish the assigned mission. Amphibious operations apply maneuver principles to expeditionary power projection in joint and multinational operations.

Amphibious operations include assaults, withdrawals, demonstrations, raids, and other operations in a permissive, uncertain, or hostile environment. An amphibious force conducts amphibious operations. An amphibious force is defined as an amphibious task force (ATF) and a landing force (LF) together with other forces that are trained, organized, and equipped for amphibious operations. Amphibious operations seek to exploit the element of surprise and capitalize on enemy weakness by projecting and applying combat power precisely at the most

advantageous location and time. Amphibious forces provide the joint force commander (JFC) with a balanced, mobile force flexible enough to provide the required capability at the right time and place with sufficient endurance to accomplish the mission.

B. Types of Amphibious Operations

Amphibious Assault. The establishment of an LF on a hostile or potentially hostile shore.

Amphibious Withdrawal. The extraction of forces by sea in ships or craft from a hostile or potentially hostile shore.

Amphibious Demonstration. A show of force conducted to deceive with the expectation of deluding the enemy into a course of action unfavorable to it.

Amphibious Raid. A swift incursion into, or a temporary occupation of, an objective, followed by a planned withdrawal.

Other Amphibious Operations. The capabilities of amphibious forces may be especially suited to conduct other types of operations, such as noncombatant evacuation operations and foreign humanitarian assistance.

Some terms unique to amphibious operations and that impact command relationships and planning are:

Commander, Amphibious Task Force (CATF). The Navy officer designated in the order initiating the amphibious operation as the commander of the amphibious task force.

Commander, Landing Force (CLF). The officer designated in the order initiating the amphibious operation as the commander of the landing force for an amphibious operation.

The planning relationships and command relationships between the CATF and the CLF are outlined in JP 3-02 Joint Doctrine for Amphibious Operations, Chapter II. The normal supported/supporting command relationship applies during amphibious operations. A brief summary follows:

In a support relationship, the CATF and CLF and other commanders designated in the order initiating planning for the amphibious operation are coequal. All decisions made by these commanders are reached based on a common understanding of the mission, objectives, and procedures and on a free exchange of information. Unless published in the order initiating the amphibious operation, the CATF and CLF will identify the events and conditions for any shifts of the support relationship throughout the operation during the planning phase and forward them to the establishing authority for approval. The establishing authority (normally the Joint Force Commander) will resolve any differences among the commanders.

Amphibious Force (AF). The Amphibious Force consists of the Amphibious Task Force (ATF) and Landing Force(LF) together with other forces organized trained and equipped to conduct amphibious operations.

Amphibious Objective Area. A geographical area (delineated command and control purposes in the order initiating the amphibious operation) within which is located the objective(s) to be secured by the amphibious task force. This area must be of sufficient size to ensure accomplishment of the amphibious task force's mission and must provide sufficient area for conducting necessary sea, air, and land operations.

Landing Area. 1) The part of the operational area within which are conducted the landing operations of an amphibious force. It includes the beach, the approaches to the beach, the transport areas, the fire support areas, the air occupied by close supporting aircraft, and the land included in the advance inland to the initial objective. 2) (Airborne) The general area used for landing troops and material either by airdrop or air landing. This area includes one or more drop zones or landing strips. 3) Any specially prepared or selected surface of land, water, or deck designated or used for takeoff and landing of aircraft.

H-Hour For amphibious operations the time the first assault elements are scheduled to touchdown on the beach, or a landing zone, and in some cases the commencement of countermine breaching operations.

III. General Information

Air Contingency Force (ACF). These combat ready forces have been developed by both operating force commanders. ACFs provide air-deployable forces to the unified commanders, with lead elements ready to deploy within 16 hours notification. ACFs provide great versatility, in that they can be used as part of the fly-in-echelon of a maritime prepositioning force, as reinforcement for an amphibious force, or as the lead element of the MEF. ACFs are on standby on each coast and on Okinawa.

Maritime Prepositioning Force (MPF). MPFs give the combatant commanders a greater dimension in mobility, readiness, and global responsiveness. The MPF program involves a total of 16 ships, organized into three squadrons or MPSRONS. MPSRON-1 operates in the EUCOM AOR, MPSRON-2 operates in the Indian Ocean, and MPSRON-3 in the Western Pacific. With the ships already loaded with unit equipment and 30 days of supplies, Marines and sailors can be airlifted to the objective area to marry-up with these specially designed, strategically deployed ships. Each MPSRON is configured to not only support a heavy or armored MEB size force using all assigned ships, but smaller MAGTFs as well using one or more ships from the squadron. Following Desert Storm, prepositioning ships were reconfigured and combat loaded to support MOOTW crisis action requirements (e.g., humanitarian assistance, disaster relief, etc.). This configuration provides operational flexibility for the POTUS/SECDEF and CJCS when responding to a future crisis.

Norway Prepositioning Program/Norway Air-Landed MAGTF (NALM). Similar in concept to the MPF but using a land-based equipment storage area, this program provides prepositioned supplies and combat equipment in Norway for an airlifted MEB.

A. Amphibious Warfare Ships (See Navy Section.)

To illustrate an example of a MEB size MAGTF, Desert Storm had over 17,000 Marines embarked in three separate elements as follows:

| | | |
|---------------------------------------|--|---------------------------------|
| Brigade size MAGTF: (8340 marines) | Brigade size MAGTF (About 7000 marines) | 13th MEU(SOC) (2300 marines) |
| 1LHA | 1 LHA | 1 LPH |
| 2 LPH | 4 LPH | 1 LSD |
| 3 LPD | 3 LPD | 1 LKA |
| 3 LSD | 4 LSD | <u>1 LST</u> |
| <u>4 LST</u> | 2 LKA | 4 ships |
| 13 ships | <u>4 LST</u> | |
| + 1 RO/RO | 18 ships + 4 MSC | |
| 1,300 hospital beds | 1,800 hospital beds | 440 hospital beds |

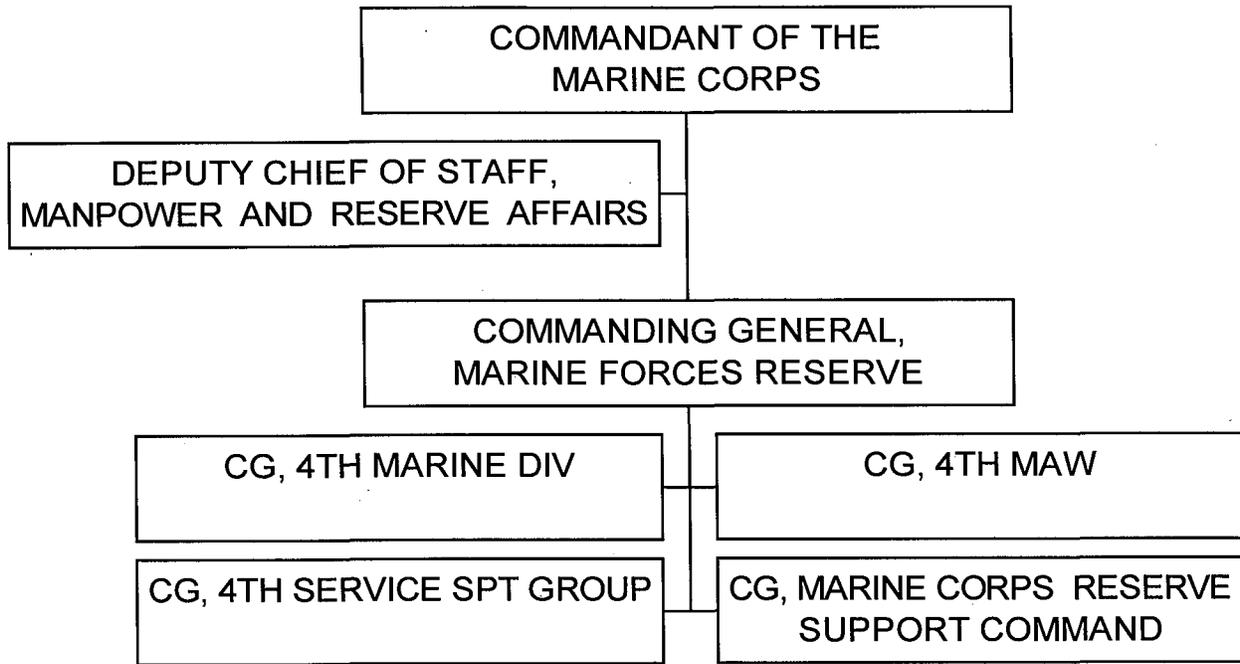
T-AVB Aviation Logistics Support Ship. 2 ships (*Wright* and *Curtiss*), in reduced operating status, provide the capability to load the vans and equipment of a Marine Corps aviation intermediate maintenance activity and transport them to the desired theater of operation. They have both a roll-on/roll-off and self-sustaining containership configuration, which permit them to off-load both alongside and offshore. After the aviation equipment is off loaded they can revert to a standard sealift role to carry 600 containers if required. Both ships were activated for Desert Storm.

T-AH Hospital Ship. (*Mercy*, Oakland CA and *Comfort*, Baltimore MD). 1000 hospital beds and 12 operating rooms. Both ships normally maintain a skeleton crew. The medical staffs are supplied by personnel from naval hospitals and clinics in CONUS

IV. Marine Corps Reserve

Organization: The Marine Corps Reserve augments and reinforces Active Component Units. Selected Marine Corps Reserve units are considered "M-Day" assets. The Active and Reserve components are closely integrated through horizontal fielding of equipment, weaponry, technology, and training. When task organized there is no distinction between Active and Reserve component Marines. Major components are the 4th Marine Division (Reinforced), the 4th Marine Aircraft Wing, the 4th Service Support Group, and the Marine Corps Reserve Support Command. Selected Reserve units are prepared to independently accomplish a variety of assignments or perform an assigned task with Active component units. In general, Marine Corps Reserve capabilities are similar to those of the Active component. During FY-04, the authorized personnel strength of the Marine Corps Reserve was approximately 40,000. Activated MFR forces are commanded by MARFORLANT.

The Marine Corps Individual Ready Reserve is a source of individual manpower to be used during mobilization for base support and combat casualty replacement. Mobilization plans include provisions for intensive combat refresher training and individual skill training prior to deployment.



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CHAPTER 5

SPECIAL OPERATIONS FORCES

I. Organization

On 16 April 1987, United States Special Operations Command (USSOCOM) was established as a unified command at MacDill Air Force Base, Florida, with two prime directives:

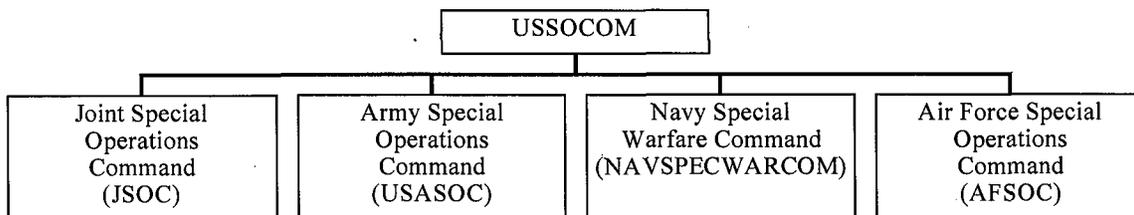
- As a supporting unified command, to provide trained and ready forces to the geographic Combatant Commanders.
- As a supported unified command, to be prepared to exercise command of selected special operations missions if so directed by the National Command Authority.

To ensure appropriate priority for resources and equipment development, Congress authorized USSOCOM its own program, budget, and head-of-agency authority for research, development and acquisition of SOF unique material and equipment. Although SOCOM is the only unified command with its own budget (about 3 billion dollars per year), mainstream funding still remains with each service chief.

A. Special Operations Component Commands

SOF is composed of specially selected and trained Army, Navy, and Air Force personnel. Each Military Department has established a major command to serve as the component of the U.S. Special Operations Command at MacDill Air Force Base in Tampa, Florida.

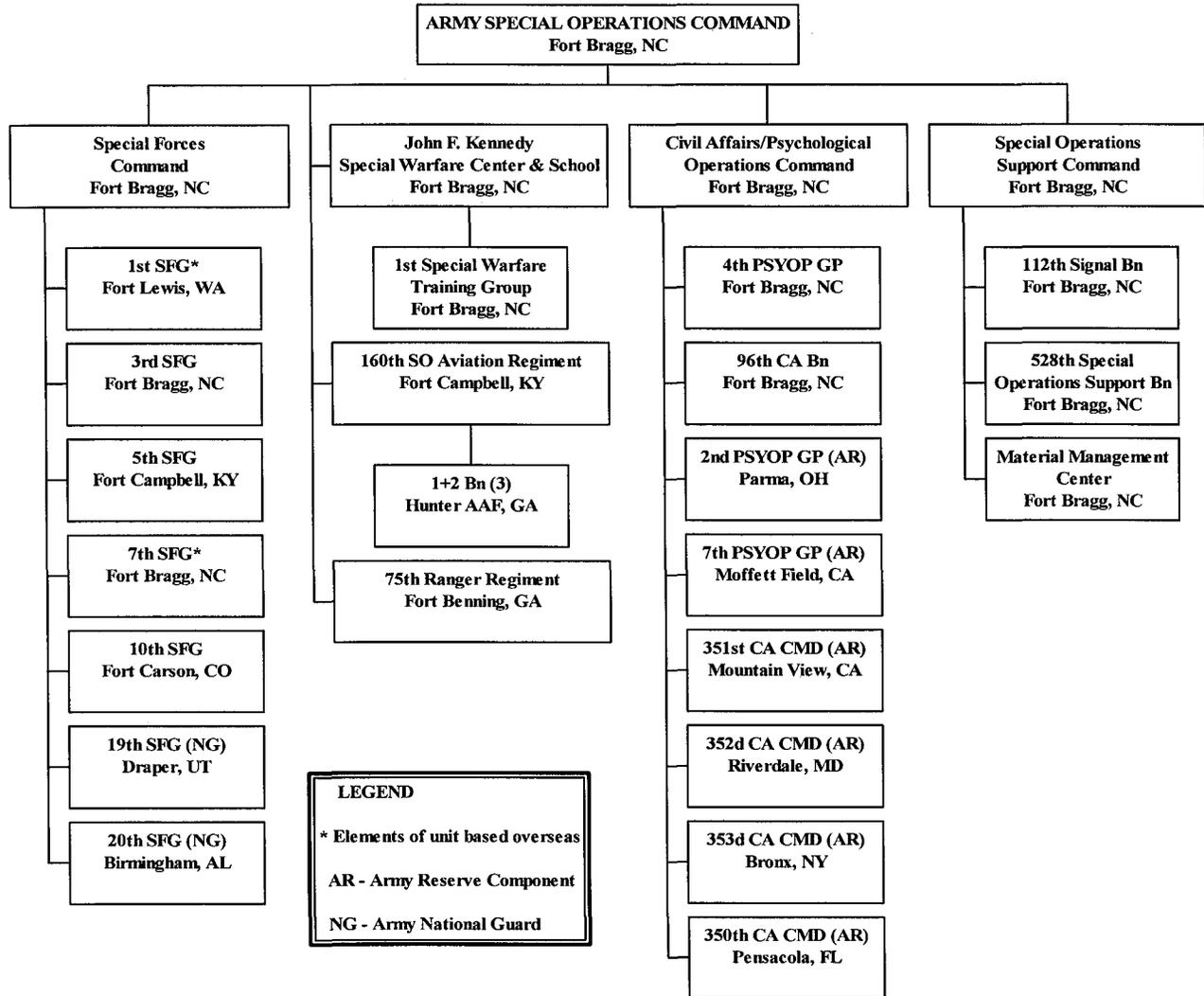
Special Operations Command (USSOCOM) Organization



(1) Army Special Operations Command

The 26,200 member Army Special Operations Command includes active and reserve Special Forces,

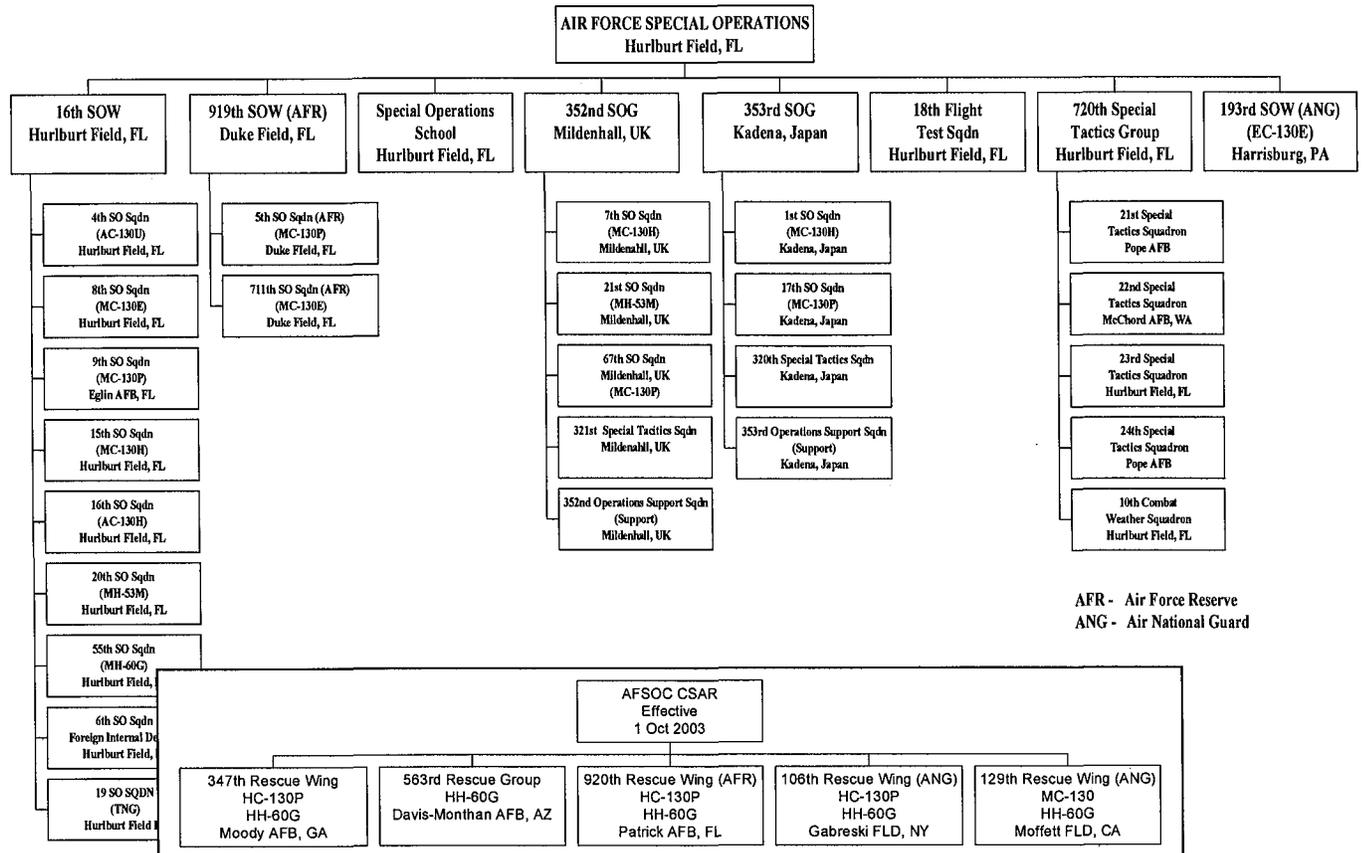
Army



Special Operations Aviation, Ranger, Psychological Operations and Civil Affairs units.

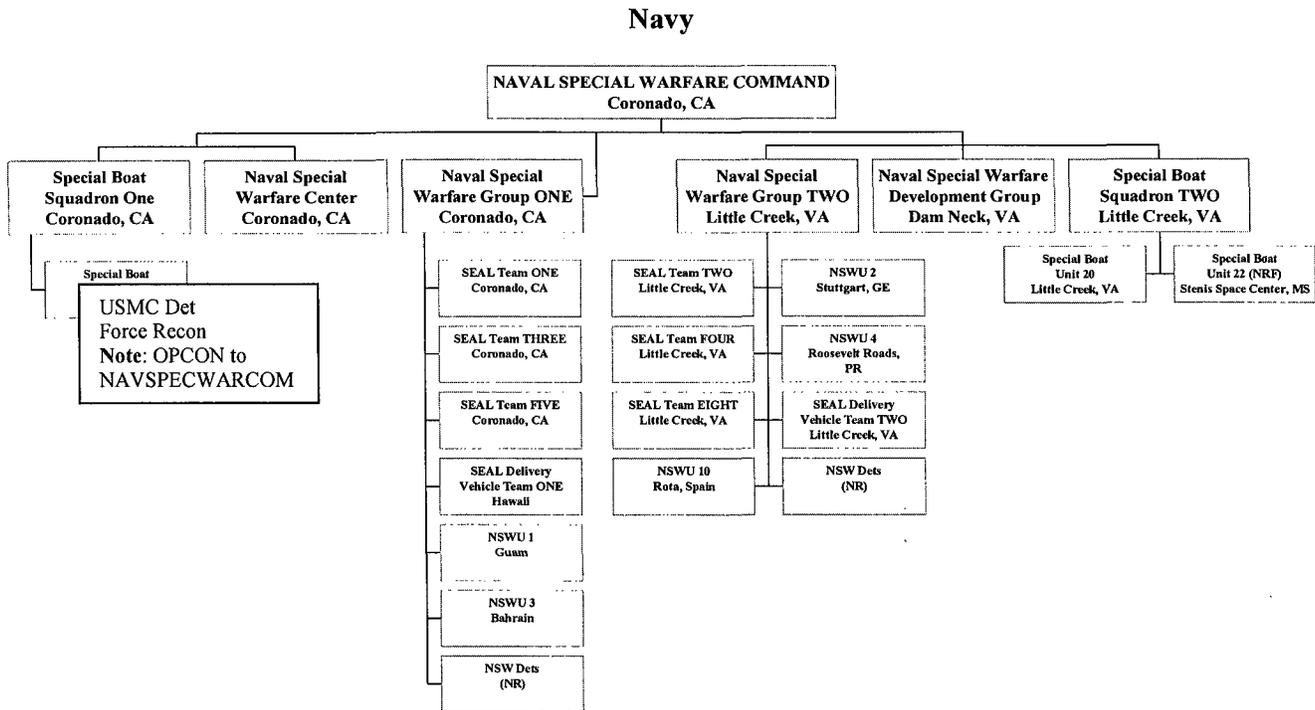
(2) Air Force Special Operations Command

The 15,800 Air Force Special Operations Command includes one active Special Operations Wing and two Special Operations Groups, one reserve Special Operations Wing, one National Guard Special Operations Group, one active Rescue Wing and one Rescue Group, one reserve Rescue Wing, and two National Guard Rescue Wings.



(3) Navy Special Warfare Command

The Navy Special Warfare Command is composed of 6,000 active and reserve operational and support personnel, which include Sea-Air-Land (SEAL) Teams, Seal Delivery Vehicle Teams, and Special Boat Squadrons and Units.



(4) Joint Special Operations Command

The fourth organization under the command of the Combatant Commander SOCOM is the Joint Special Operations Command at Fort Bragg. The JSOC serves as a standing joint special operations task force responsible for special missions planning, training, tactics and equipment development.

Theater Special Operations Commands

Each regional Combatant Commander has established a separate special operations command (SOC) to meet its theater-unique special operations requirements. As subordinate unified commands, the theater SOCs plan, prepare, command, and control theater SOF from the Army, Navy, and Air Force. The theater SOC (SOCSOUTH, SOCEUR, SOCCENT, SOCACOM, SOCPAC) provides the framework around which a Joint Special Operations Task Force (JSOTF) can be structured.

II. Concept of Operations

Operations conducted by specially organized, trained and equipped military and paramilitary forces to achieve military, political, economic or psychological objectives by unconventional military means in hostile, denied or politically sensitive areas. These operations are conducted during peacetime competition, conflict and war, independently or in coordination with operations of conventional, non-special operations forces. Political-military considerations frequently shape special operations, requiring clandestine, covert or low visibility techniques and oversight at the national level. Special operations differ from conventional operations in degree of physical and political risk, operational techniques, mode of employment, independence from friendly support and dependence on detailed operational intelligence and indigenous assets.

The five characteristics that distinguish special operations missions from conventional military operations are:

- One time opportunity
- Unorthodox approaches
- Unconventional training and equipment
- Political sensitivity
- Need for specialized intelligence

The principal special operations forces missions are:

| | |
|--|---|
| <p>UNCONVENTIONAL WARFARE (UW) Objective: Conduct a broad spectrum of military & paramilitary operations in enemy-held, enemy-controlled, or politically sensitive territory.</p> | <ul style="list-style-type: none"> • Long-duration, indirect activities including guerrilla warfare & other offensive, low visibility, or clandestine operations. • Mostly conducted by indigenous forces organized, trained, equipped, supported, & directed in varying degrees by SOF. |
| <p>DIRECT ACTION (DA) Objective: Seize, damage, or destroy a target; capture or recover personnel or material in support of strategic/operational objectives or conventional forces.</p> | <ul style="list-style-type: none"> • Short-duration, small-scale offensive actions. • May require raids, ambushes, direct assault tactics; emplace mines & other munitions; conduct standoff attacks by firing from air, ground, or maritime platforms; designate or illuminate targets for precision-guided munitions; support for cover & deception operations; or conduct independent sabotage normally inside enemy-held territory. |
| <p>SPECIAL RECONNAISSANCE (SR) Objective: Verify, through observation or other collection methods, information concerning enemy capabilities, intentions, & activities in support of strategic/operational objectives or conventional forces.</p> | <ul style="list-style-type: none"> • Reconnaissance & surveillance actions conducted at strategic or operational levels to complement national & theater-level collection efforts. • Collect meteorological, hydrographic, geographic, & demographic data; provide target acquisition, area assessment, & post-strike reconnaissance data. |

| | |
|--|---|
| <p>FOREIGN INTERNAL DEFENSE (FID) Objective: Assist another government in any action program taken to free & protect its society from subversion, lawlessness, & insurgency.</p> | <ul style="list-style-type: none"> • U.S. government interagency activity to foster internal development of economic, social, political, & military segments of a nation's structure. • Train, advise, & assist host-nation military & paramilitary forces. |
| <p>COUNTER TERRORISM (CT) Objective: Preempt or resolve terrorist incidents.</p> | <ul style="list-style-type: none"> • Interagency activity using highly specialized capabilities. |
| <p>COUNTER PROLIFERATION OF WMD (CP) Objective: Seize, destroy, capture, or recover weapons of mass destruction</p> | <ul style="list-style-type: none"> • Train and equip forces to conduct or support SR or DA missions to interdict sea or land shipment of dangerous materials or weapons of mass destruction. |
| <p>INFORMATION OPERATIONS (IO)</p> | <ul style="list-style-type: none"> • Support other U. S. Government interagency COUNTER PROLIFERATION efforts |
| <p>PSYCHOLOGICAL OPERATIONS (PSYOP) Objective: Induce or reinforce foreign attitudes & behavior favorable to U.S. objectives.</p> | <ul style="list-style-type: none"> • Influence emotions, motives & behavior of foreign governments, organizations, groups, & individuals. |
| <p>CIVIL AFFAIRS OPERATIONS (CAO) Objective: Establish, maintain, influence, or exploit relations among military forces, civil authorities, & civilian populations to facilitate military operations.</p> | <ul style="list-style-type: none"> • May be conducted as stand-alone operations or in support of a larger force. • May include military forces assuming functions normally the responsibility of the local government. |

III. General Information

A. U.S. Army Special Operations Forces

- Force of approximately 30,000 personnel.
- Highly skilled, robust capability
- Made up of: Special Forces (SF: Term unique to the Army, the Green Berets), Rangers,
- Special Operations Aviation (SOA), Psychological Operations (PSYOP) and Civil Affairs (CA).

Army SOF conduct operations far beyond the forward limits of conventional forces. SOF units plan, conduct, and support SO in peace, low-intensity conflict, or war. Their missions include UW, FID, DA, SR, and CT. Mission priorities are determined by the needs of the theater Combatant Commanders. Each SF Group prepares for operations for a particular geographic area. They are regionally focused. Cross-trained experts in each 12-man (could be smaller). A-detachment excels in: language skills for the region, teaching skills, light weapons, demolitions, field communications, combat intelligence, and paramedical support.

Army Ranger and SOA units are currently organized under the U.S. Army Special Operations Integration Command. Rangers are organized into a Ranger regiment of three battalions and a headquarters company. Together they employ over 1,600 personnel who conduct DA operations. They can operate independently, with other SOF, or with conventional forces. They specialize in quick strikes/shock action.

SOA units provide dedicated support to other SOF. Comprised of one active regiment in the United States, one detachment in Panama, and one National Guard battalion, their missions include insertion, extraction, resupply, aerial security, armed attack, medical evacuation, electronic warfare, mine dispersal, and command and control support. Currently equipped with MH-60A/L BLACK HAWK, MH-47D CHINOOK, and A/MH-6 helicopters, the aviation units are scheduled to begin receiving MH-60K and MH-47E aircraft this year.

PSYOP forces are currently organized into 3 PSYOP groups (1 active and 2 reserve components) and 13 PSYOP battalions (composed of 5 active and 8 reserve battalions). The groups vary in number and types of subordinate units based on mission and area orientation. They conduct strategic, operational, and PSYOP activities to influence and change the attitudes, emotions, and behavior of selected audiences.

The CA force, 97 percent of which is in the Army Reserve, consists of eight CA commands or brigades. Functions include establishing favorable relationships between U.S. military and foreign governments and populations, facilitating military operations through population or refugee control, advising and assisting host-nation forces, and supporting other U.S. agencies. They may also be tasked to establish civil administrations in support of a friendly nation or in an occupied territory.

B. U.S. Navy Special Operations Forces

Naval Special Warfare (NSW) forces (approximately 6,000 personnel) support naval and joint special operations within the theater unified commands. Missions are UW, FID, DA, SR, and CT. Mission priorities are determined by the needs of the theater Combatant Commander.

SEAL Teams, consisting of eight 16-man platoons, conduct reconnaissance, direct action, unconventional warfare, foreign internal defense, and other operations in maritime or riverine environments.

SEAL Delivery Vehicle (SDV) Teams operate and maintain submersible systems that deliver and recover SEALs in hostile areas and conduct reconnaissance and direct action missions. Both SEAL and SDV elements are capable of performing limited shallow water mine clearing operations.

Special Boat Squadrons and Special Boat Units operate several types of coastal and river patrol craft and specialized SEAL insertion craft.

NSW Units are command and control elements located outside the continental United States to support other NSW forces assigned to theater SOCs or components of naval task forces.

The Naval Special Warfare Development Group provides centralized management for the test, evaluation, and development of current and emerging technology applicable to Naval Special Warfare forces. It also develops maritime, ground, and airborne tactics for NSW, and possible DOD-wide, application.

In November 1985, the Naval Special Warfare Center was established at the Naval Amphibious Base, Coronado, to provide instruction and training for U.S. and allied military personnel in NSW operations. It is also the principal authority for NSW doctrine.

C. U.S. Air Force Special Operations Forces

Air Force SOF (approximately 15,800 personnel) consists of uniquely equipped fixed and rotary wing aircraft operated by highly trained aircrews whose missions include inserting, extracting, resupplying, aerial fire support, refueling, and PSYOP. They are organized into one active component Special Operations Wing, two active Special Operations Groups, one reserve Special Operations Wing, one reserve Special Operations Group, and one active Special Tactics Group, which operate expeditionary airfields, conduct classified missions, and fly combat rescue missions. These units include the following:

Three active squadrons with MC-130 COMBAT SHADOW aircraft used to refuel SOF helicopters and to support limited insertion, extraction, or resupply missions.

Four active squadrons with MC-130 COMBAT TALON aircraft used for long-range insertion, extraction, or resupply missions deep within hostile territory. They can also conduct PSYOP leaflet drops and deliver 15,000-pound BLU-82 bombs. Carries approximately 52 SOF personnel, airdrops 26, Range 2,800 miles, air refuelable.

Two active squadrons with MH-53J PAVE LOW III helicopters used for medium to long-range insertion, extraction, or resupply missions in hostile territory. Superior avionics, lifts 35 personnel, air refuelable.

Two squadrons with AC-130 SPECTRE gun ship aircraft for aerial fire support or armed escort missions. These aircraft support both SOF and conventional forces. Side firing 105mm and 40mm (25mm on later versions) guns. Range (max payload) 2,300 miles.

One Air National Guard group equipped with EC-130E VOLANT SOLO aircraft to support PSYOP. These are equipped to broadcast television and radio signals. 10 hour, unrefueled mission duration.

Several other units provide critical support to SOF and conventional forces. A Special Tactics Group includes combat control and pararescue personnel capable of medical support, terminal guidance for weapons, and control of assault zone aircraft and fire support. A communications squadron provides support to deployed Air Force SOF.

The U.S. Air Force Special Operations School at Hurlburt Field provides special operations-related education to personnel from all branches of the Department of Defense, government agencies, and allied nations. Subjects covered in the 15 courses presented at the school range from regional affairs and cross-cultural communications to antiterrorism awareness, revolutionary warfare, and psychological operations.

D. USMC Marine Expeditionary Units Special Operations (MEU (SOC))

Various deploying Marine Expeditionary Units (MEU) now have specific forces organized and trained for contingency special operations. This special operations capable MEU (MEU (SOC)) presents the regional Combatant Commander with an on-station capability in the event of a time sensitive crisis. These personnel are specifically associated with the MEU and are not under the auspices of USSOCOM. (See USMC Section for MEU (SOC) capabilities and Appendix O for equipment details)

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CHAPTER 6

STRATEGIC LIFT

I. Organization

United States Transportation Command, (USTC), located at Scott AFB, Ill. is the single manager of the global defense transportation system, and is tasked with the coordination of people and transportation assets to allow our country to project and sustain forces, whenever, wherever, and for as long as they are needed. Additionally, as the newly designated Distribution Process Owner for DoD, effective Sep 03, USTC is examining the system, its integral parts and will redefine and streamline the distribution process.

Responding to the needs of the Department of Defense's warfighting commanders is USTRANSCOM's No. 1 priority.

USTRANSCOM'S Transportation Component Commands

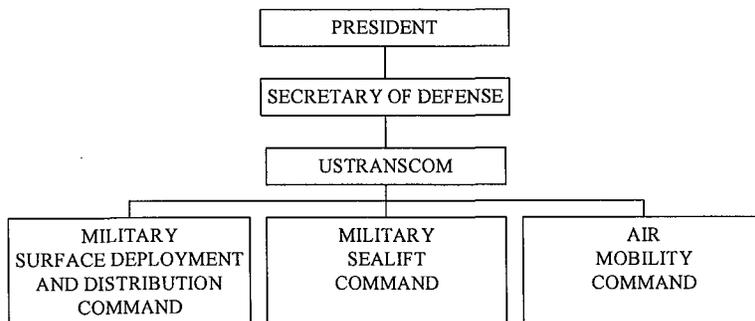
Composed of three component commands: USTRANSCOM skillfully coordinates missions worldwide using both military and commercial transportation resources.

Air Mobility Command, (AMC) AMC is the Air Force component command for USTC. This command provides common-user and exclusive-use airlift and aeromedical evacuation transportation services for deploying, employing, sustaining, and redeploying U.S. forces anywhere in the world. AMC also controls the majority of the nation's aerial refueling aircraft and administers and executes the Civil Reserve Air Fleet (CRAF), a fleet of commercial aircraft committed to support the transportation of military forces and material in times of crisis.

Military Sealift Command, (MSC) MSC is the Navy component command for USTRANSCOM. This command provides common-user and exclusive-use sealift transportation services to deploy, employ, sustain, and redeploy U.S. forces between seaports of embarkation (SPOEs) and seaports of debarkation (SPODs). MSC uses a mixture of government-owned and commercial ships for three primary functions: Surge sealift, principally used to move unit equipment from the United States to theaters of operations all over the world; prepositioned sealift, comes under USTRANSCOM's command once the ships have been released into the common-user fleet; and sustainment sealift, the life line to keep deployed forces continuously supplied. MSC assets include: Fast sealift and Ready Reserve Force ships. In addition, MSC charters and books space on commercial ships and executes the Voluntary Intermodal Sealift Agreement (VISA) contracts for chartered vessels.

Surface Deployment and Distribution Command, (SDDC). The SDDC (formerly Military Traffic Management Command) is the Army component for USTRANSCOM. This command is the overland lift component and primary surface distribution manager for USTRANSCOM. SDDC's mission is to provide common-user ocean terminal and traffic management services to deploy, employ, sustain, and redeploy U.S. forces on a global basis. SDDC conducts transportation engineering, serves as the Single Port Manager for theater Combatant

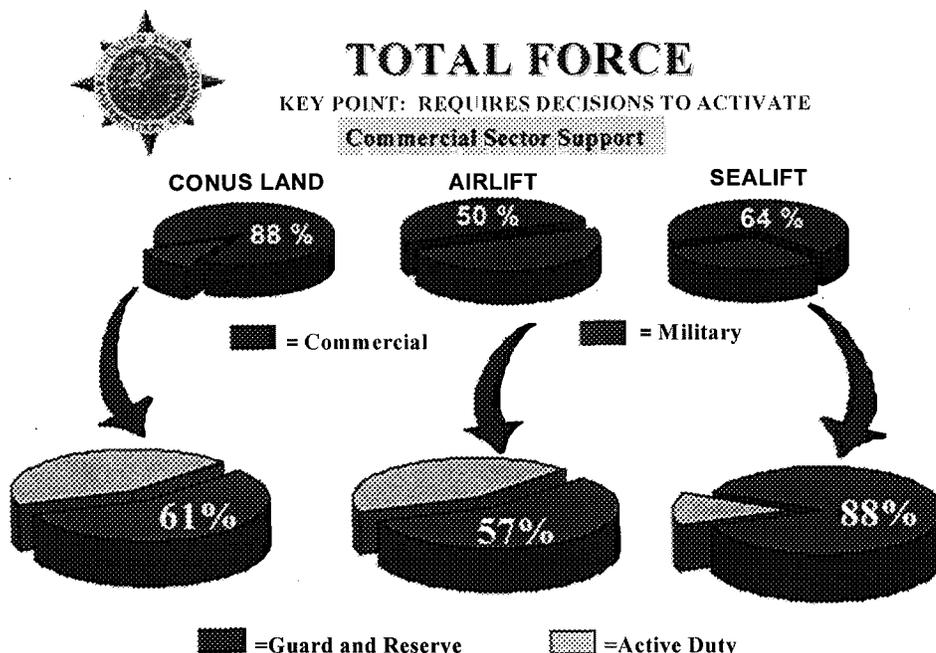
Commanders, and develops integrated traffic management systems. SDDC has a presence in 24 water ports worldwide.



II. Concepts of Operations

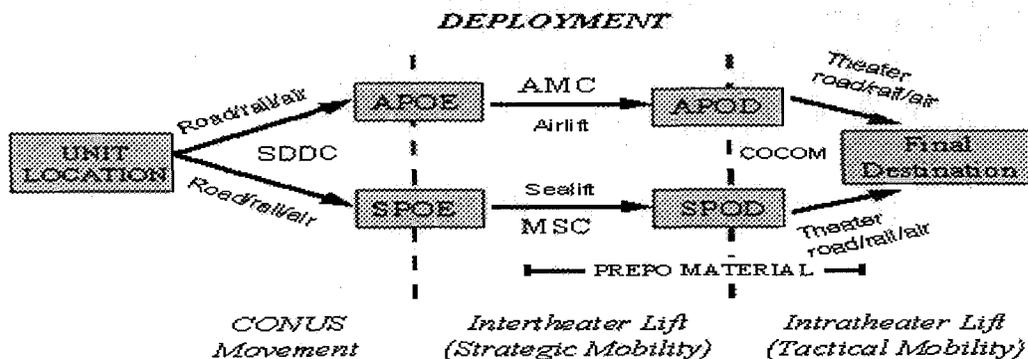
An important role in our national military strategy is the projection of combat power. Strategic mobility is the foundation for one of three methods of employing and sustaining. If the strategic mobility of the armed forces is limited, then U.S. military power, as an instrument of national policy, is limited. Strategic mobility is a product of airlift, sealift, and ground transportation. Actual movement requirements and capabilities are scenario-oriented and depend upon type and quantity of cargo, the number of passengers, distance, destination, fuel and facilities available. It is important to note that the U.S. military can't do its job without the cooperation of the commercial sector and reserve components. The graphic below vividly depicts our nation's reliance on the total force concept. Generally, no single mode of lift / movement alone is sufficient and as such, proper advance planning considerations are a must.

The subsequent chart depicts numerous advantages and disadvantages of the different means / methods of having equipment available where needed.



| Mode | Speed | Flexibility | Cost | Vulnerability | Other |
|--------------------|---------------------------|---------------------|------------------------|------------------------|--|
| Airlift | Fast | Very flexible | Very Expensive | Moderate Vulnerability | Limited Capacity Airfield Dependent |
| Sealift | Slow | Moderately flexible | Relatively Inexpensive | Moderate Vulnerability | Large Capacity Seaport/Sea-lane Dependent |
| Preposition | In Theater but needs lift | Less Flexible | Moderately Expensive | Vulnerable | Requires Marry-up/ Repositioning Duplicate sets required |
| Forward Deployment | In Place | Less Flexible | Very Expensive | Vulnerable | Signals Political/ Military Commitment |

Movement of a major US fighting force overseas requires all three legs of the strategic lift system. First, the force must be moved from the assembly area, such as a reserve center or major army post. SDDC arranges transportation to the air/sea port of embarkation. This transportation may be by road, rail, or air. Next, movement from the APOE/SPOE to the APOD/SPOD is provided by AMC or MSC for air and sea transport, respectively. Once in theater, the Combatant Commander is responsible for movement to the final destination. The figure below provides a graphic summary of this operation. Large divisions and air wings cannot be moved and sustained without the use of sealift and airlift together.



III. General Information

A. Ground Transport

For units located more than a one-day road march (400 miles) from the mobilization station or POE, Army planners usually maximize the use of commercial transport (rail, motor, or barge). This reduces wear and tear on the equipment and reduces maintenance requirements at the marshalling area. If a Mechanized Division did move its own equipment to the SPOE, its convoy would require 776 40-foot flatbeds, over 4,100 vehicles driven, 2,30 vehicles towed, and 285 20-foot containers. Certain outsized equipment would still need to be moved by rail and would require 334 rail flatcars.

If the unit is traveling over 400 miles, it would most likely move by rail. United equipment railcars will normally move as a unit train and the number of railcars will vary. Regardless of the number of railcars, all unit trains are planned to average 22 mph, for a distance of 528 miles per day. Any loads exceeding industry size standards must receive clearance approval from the involved railroad companies prior to the move.

B. Airlift

Airlift assets currently available are the C-5, C-17, , C-130, DC-10, and aircraft of the Civil Reserve Air Fleet (CRAF) such as the Boeing 747 and DC-10. The table below gives a description of aircraft capabilities.

| ORGANIC AIRLIFTERS | CARGO | | AERIAL REFUELING | SMALL AUSTERE AIRFIELD | AERIAL DELIVERY |
|--------------------|---------|----------|------------------|------------------------|-----------------|
| | OUTSIZE | OVERSIZE | | | |
| C-5 | YES | YES | YES | LIMITED | LIMITED |
| C-130 | NO | YES | YES | YES | YES |
| C-17 | YES | YES | YES | YES | YES |
| KC-10 | NO | YES | YES | NO | NO |
| B-747 | NO | YES | NO | NO | NO |
| OTHER CRAF | NO | YES/NO | NO | NO | NO |

Division Sorties. An example of the number of missions required to transport particular division types is given below. Although factors such as origin, destination, weather, peacetime vs. wartime configuration would impact the numbers you can still get a feel for the level of effort required to accomplish this task. As is very evident from this table, movement of even light divisions by airlift is difficult; movement of large heavy divisions by air is practically impossible and very time and resource intensive. (Source: SDDC TEA PAM 700-5, Deployment Planning Guide, May 01)

| Unit | Acft type | C-5 | C-17 |
|--------------------------------|-----------|------|------|
| Infantry Division (Light) | | 331 | 425 |
| Airborne Division | | 402 | 529 |
| Air Assault Division | | 600 | 766 |
| Infantry Division (Mechanized) | | 1254 | 1682 |
| Armored Division | | 1285 | 1722 |

CRAF Assets. As mentioned earlier, our nation relies heavily on the commercial sector to augment military capabilities. To supplement the airlift capability of the Air Force, CRAF makes available a number of aircraft from civilian airline carriers

The CRAF airlift capability can be activated in three stages. These stages are as follows:

- Stage I. Stage I may be activated by the USCINCTRANSCOM,1 to perform airlift services when the AMC airlift force cannot meet simultaneously both deployment and other traffic requirements.
- Stage II. Stage II is an additional airlift expansion identified for an airlift emergency which does not warrant national mobilization but may be activated by authority of the SECDEF.
- Stage III. Stage III makes available the total CRAF airlift capability when required for DOD operations during major military emergencies involving US Forces. The SECDEF issues the order to activate CRAF stage III only after a national emergency has been declared by the President or Congress.

C. Sealift

Contingency Support Fleet

The Military Sealift Command's Afloat Prepositioning Force is composed of "36" ships, (34 at sea & 2 aviation support ships kept in reduced operating status), are an essential element in the nation's triad of power projection into the 21st century - sea shield, sea strike and sea basing. These ships are pre-loaded with military equipment and supplies needed for a war or other contingency. They are strategically positioned in key ocean areas, making it possible to deploy on short-notice the vital equipment, fuel, and supplies to initially support our military forces when ever needed.

The Afloat Prepositioning Force is sub-divided into three separate categories:

The Maritime Prepositioning Force, supporting the Marine Corps;,: These 16 ships provide additional sustainment (and its organic lift) for Marine expeditionary forces. Three squadrons of 4 or 5 ships are positioned in the Atlantic, Western Pacific, and Indian Ocean areas. Each squadron has equipment and 30 days supplies for one 16,000 MAGTAF These ships have no amphibious capability, but can off-load (in non-hostile environments) at unimproved ports or in stream using integral handling equipment, cranes and lighterage carried aboard.

The Combat Prepositioning Force, supporting the Army; : Similar to the Marine Corps prepositioning concept, the fleet consists of 10 ships, of those 8 are LMSRs (Large Medium Speed Roll On – Roll Off) vessels. These ships, capable of responding to a crisis in the Middle or Far East within 12 days, hold equipment necessary to support 34,000 U.S. Army personnel for 30 days. The ships are located at Diego Garcia, Arabian Gulf, and Guam/Saipan.

The Logistics Prepositioning Force, supporting the Navy, Defense Logistics Agency, & Air Force: 10 ships serve the Services, DLA, and DFSC. 4 ships, loaded with Air Force ammunition, are located at Diego Garcia and in the Western Mediterranean. The remaining 6 vessels consist of 2 pol distribution system tanker ships belonging to DLA and DFSC, 1 ship dedicated for Navy ammunition, 2 vessels designated as aviation logistics support ships in support of the Marine Corp. These vessels are maintained by the Maritime Administration, one on the East Coast and another on the West Coast in a reduced operating status capable of being ready to deploy in 5 days. The last vessel of the program also supporting Marine Corp requirements is High Speed Vessel, (HSV Westpac Express). The HSV is a high speed multihull vessel chartered for Marine in the western Pacific. The ship can be used to carry up to 970 Marines and 420 tons of cargo, or 531 tons of cargo, if no Marines are embarked.

Ready Reserve Force (RRF). 89 ships that are kept for activation during a declared national emergency or when the president declares mobilization necessary. Upon mobilization, varying times of activation from 5 to 20 days apply to individual ships.

D. Voluntary Intermodal Sealift Agreement, VISA

VISA is our nation's primary sealift mobilization program developed by CDRUSTRANSCOM, the Maritime Administration (MARAD), and the U.S. flag commercial sealift industry. It's an intermodal, capacity-oriented program rather than a ship-by-ship program. VISA's objective is to provide vessel capacity, intermodal movement, and cargo management for the shipment of DOD emergency cargoes. It serves as the mechanism that assures the movement of ammunition and resupply (i.e., "sustainment") cargo, and complements DOD's organic sealift capabilities used for the initial-deployment ("surge") phase of a military action. Like CRAF, it is phased to meet requirements.

Stage I requires 15 percent of total enrolled capacity.

Stage II requires 40 percent; (Stages 1 & 2 meet DOD requirements for a single major theater war) Stage III requires 15 percent from MSP vessels (and other vessels receiving federal subsidy), and 50 percent from the remaining VISA participants

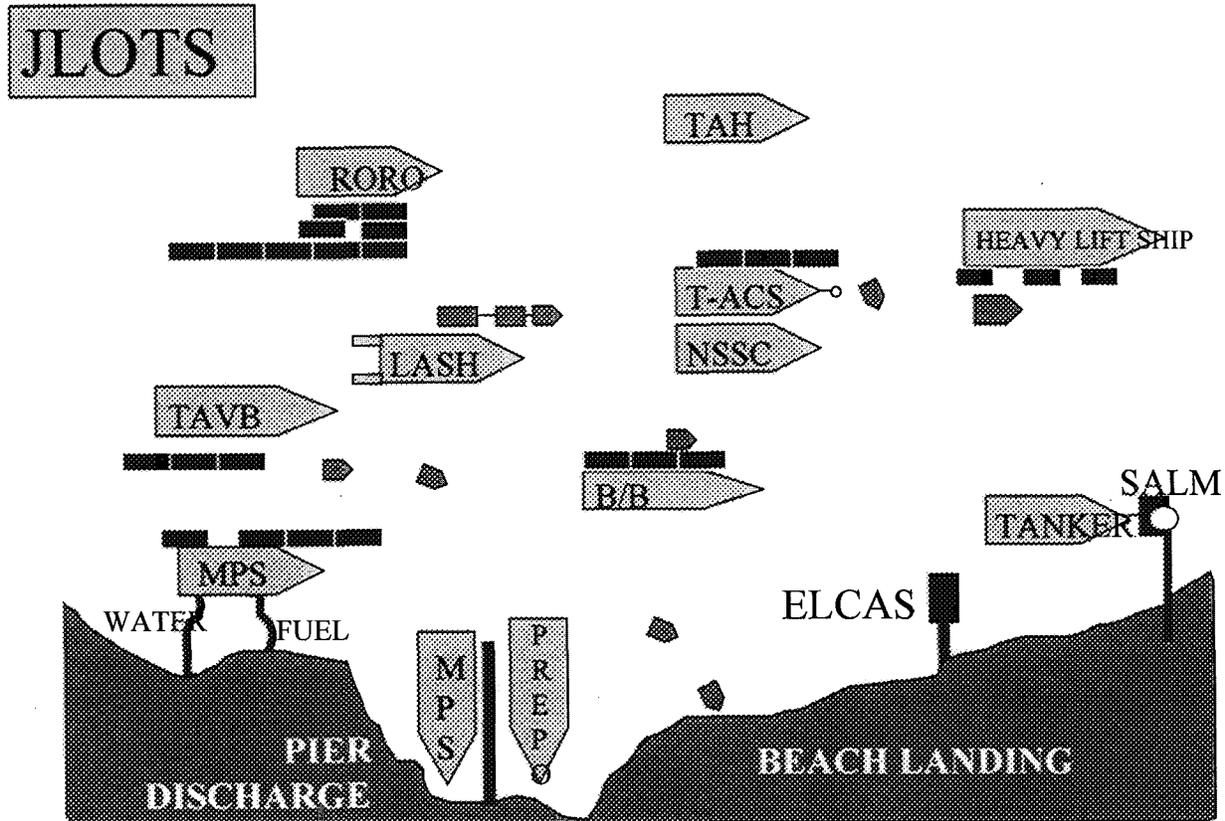
All major U.S. flag carriers are enrolled in VISA.

MSC counts on the following four types of ships to perform most of its missions: breakbulk, container, barge carriers, and RO/RO (roll on, roll off).

E. Joint Logistics Over the Shore (JLOTS)

JLOTS is the loading and unloading of ships without the benefit of fixed port facilities in either

friendly or undefended (i.e. locally non-hostile) territory. Both the Navy and Army conduct LOTS operations. The scope of the JLOTS operation depends on geographic, tactical, and time considerations. The figure on the next page shows what a complex JLOTS operation may look like.



ELCAS -- **Elevated causeway** (810' long /240'x72' pier head) which can be used up to Sea State (SS) 5 (12' waves); 7 days installation time required.

SALM -- **Single Anchor Leg Mooring** used in 35' to 190' of water. Can anchor up to 4 miles of 6" floating or submersible conduit for offshore petroleum discharge at 1000 gpm capacity; can be used up to SS 5.

LASH -- **Lighterage Aboard Ship** (barge carrier) can carry from 24 to 89 barges measuring 60'x30' (each capable of carrying 370 tons, 18,500 sq.ft., or 490 MTON). LASH can offload barges organically, but barges require shoreside cranes to unload.

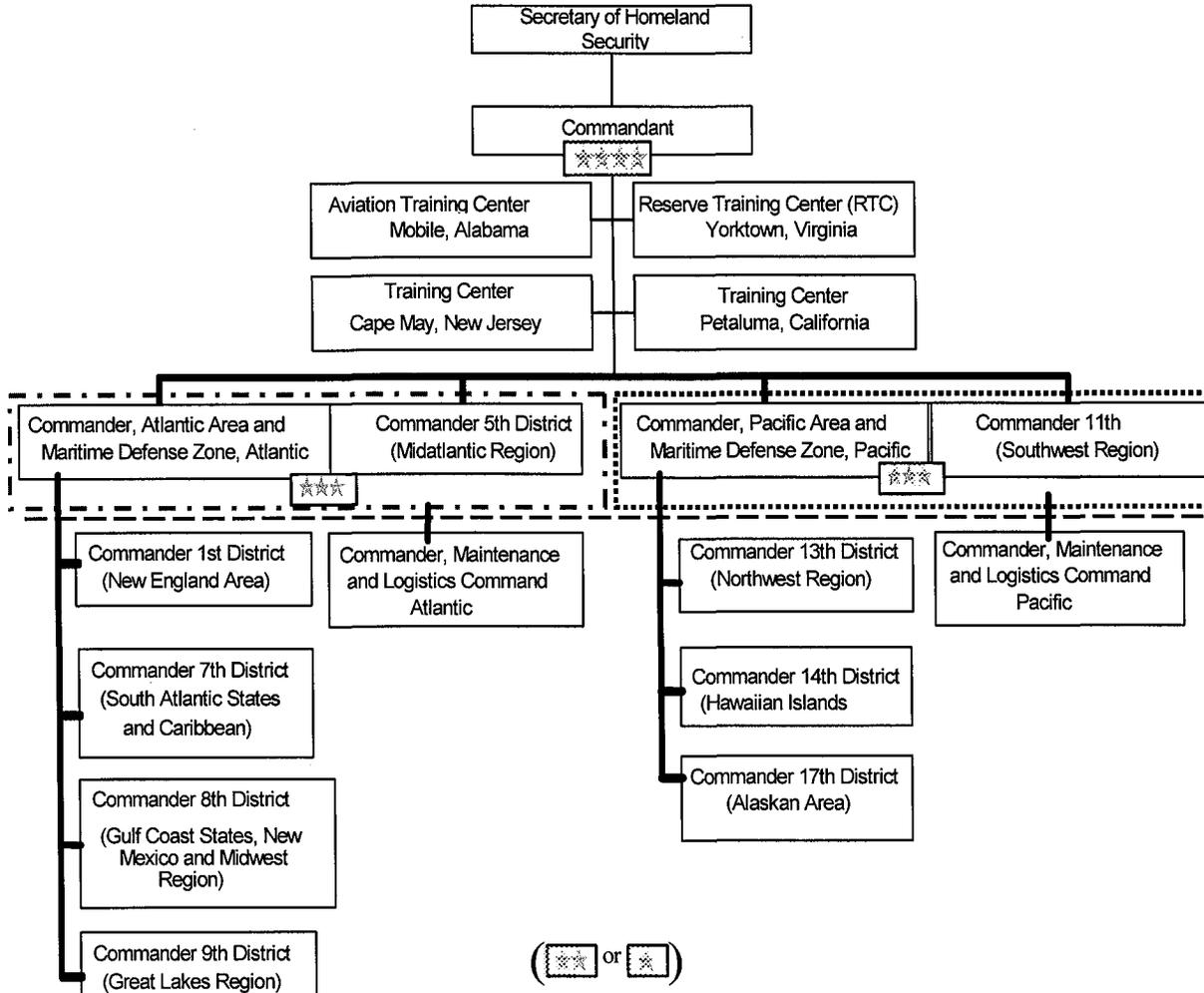
The MPS ship depicted above is offloading fuel and water through Amphibious Assault Bulk Fuel (Water) Systems (AABFS/AABWS). This system consists of up to 2 miles of buoyant 6" hose deployed from an MPS or LST, and which is capable of carrying 600 gpm even in moderate sea states (up to SS3, with 5'-6' waves). Like several of the ships shown here, the non-self-sustaining containership (NSSC) is offloading its cargo onto a platform built from several floating modular causeway sections measuring 21' wide by 90' long, which are useful up to SS 2 (2'-3' waves). Unlike "self-sustaining" ships, however, it must use the services of a T-ACS (auxiliary crane ship) to lift its cargo off. The self-sufficient RO/RO depicted is offloading its

rolling stock onto 6 causeway modules arranged 2 long x 3 wide, which form a 65'x182' platform. Cargo is being removed from the floating causeways and platforms by small landing craft (LCUs or LCMs) and taken to shore or to the ELCAS for offload.

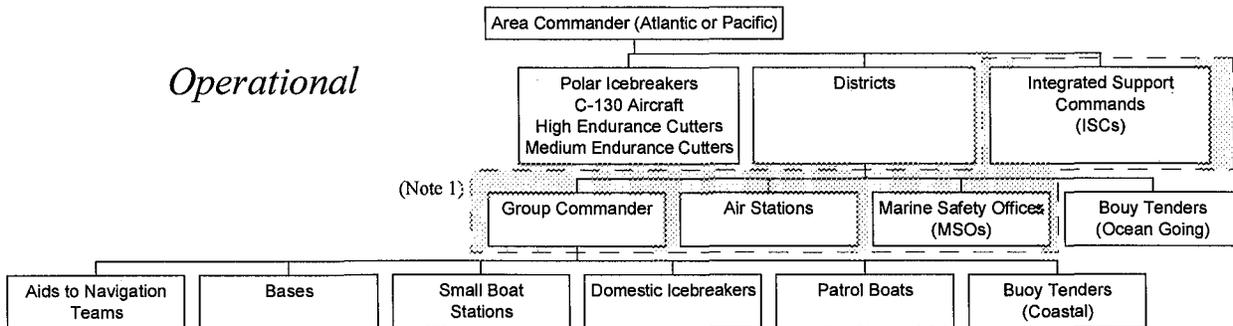
CHAPTER 7

UNITED STATES COAST

I. Organization



Operational



Note 1: Integrated Support Commands, when established, include some or all of the commands within the dotted line shown.

II. Concepts of Operations

Title 14 U.S.C. 2 states in part that the Coast Guard on the high seas and waters subject to U.S. jurisdiction will:

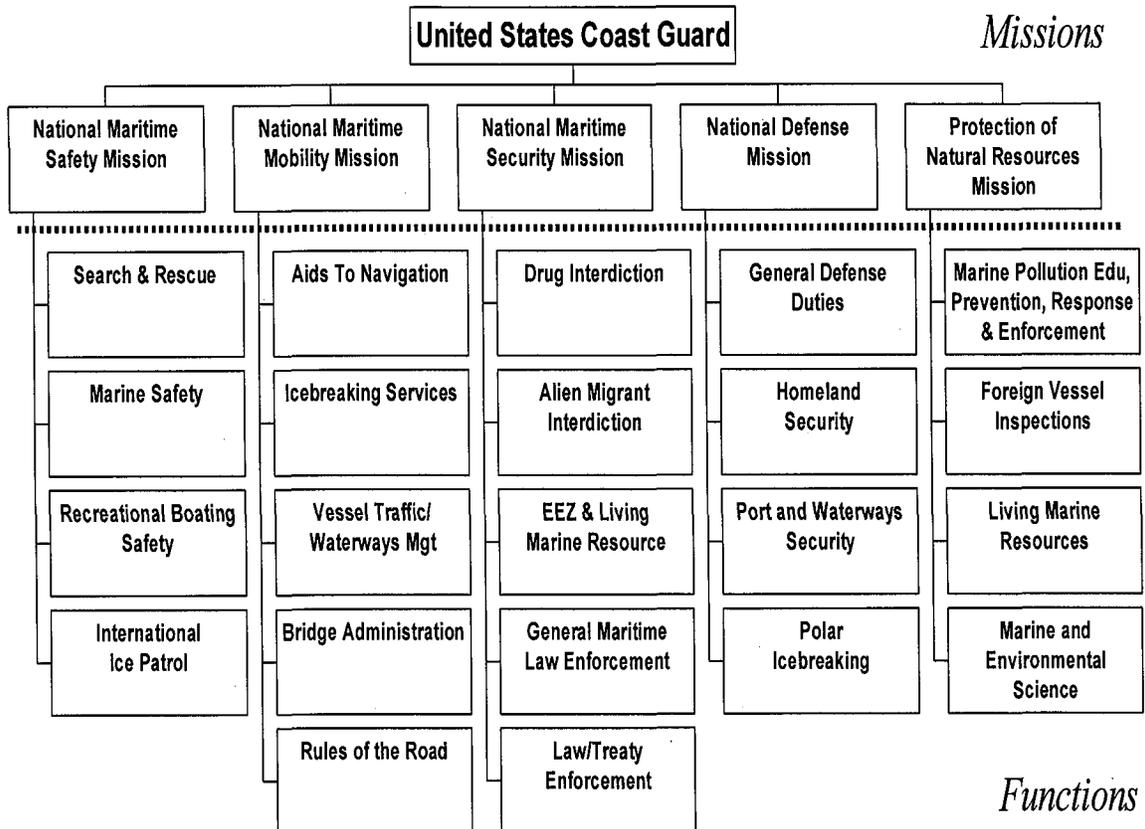
"Enforce or assist in the enforcement of all applicable Federal laws;"

"Administer laws and promulgate and enforce regulations for the promotion of safety of life and property;"

"Operate, with due regard to the requirements of national defense, aids to maritime navigation, icebreaking facilities, and rescue facilities for the promotion of safety;"

"Maintain a state of readiness to function as a specialized service in the Navy in time of war, including the fulfillment of Maritime Defense Zone command responsibilities."

These statutory requirements have been translated into the following Coast Guard mission areas and functions:



III. General Information

The Coast Guard was established in 1790 as the Revenue Marine and became the Coast Guard with the merger of the Revenue Cutter Service and the Life Saving Service in 1915. It absorbed the Federal Lighthouse Service and Bureau of Marine Inspection just before WWII and shifted from Treasury to Department of Transportation in 1967. As a result of the Homeland Security Act of 2002, the Coast Guard was moved from the Department of Transportation to the newly formed Department of Homeland Security.

The Coast Guard has a role in just about every federal - activity at sea, including scientific research and hydrography. It is the only armed force not located within the Department of Defense, but a full time military service subject to the UCMJ and with the same rank and pay structure as the Navy. It becomes a "specialized service" within the Navy during time of war. At the direction of the President, or with the concurrence of the Secretaries of Defense and Homeland Security, it may provide forces to the Navy for peacetime crises (e.g. Grenada) or undeclared wars/UN Police Actions (e.g. Desert Storm/OIF). The Coast Guard trains continuously with the Navy and other Services, providing primary forces for the Maritime Defense Zones under the Fleet Commanders.

The Coast Guard is an important asset for national policy since in many international situations, the presence of a Coast Guard vessel may be less provocative and thus more advantageous than a Navy warship (e.g. the KAL 007 shoot down and fisheries/sovereignty disputes with Canada and Mexico).

The Coast guard has 39,000 Active Duty, 8,000 Reserves, 6,000 Civilians and 35,000 Coast Guard Auxiliary (Civilians). Women have been fully integrated on all classes of vessels.

Tables below show the major aircraft and ship types operated by the Coast Guard. The Coast Guard has recently embarked on the "Deepwater" project -- a \$24 billion, 25-year program designed to replace aging ships, aircraft and communications systems. A key component of the Integrated Deepwater System is the 8-ship class of new National Security Cutters, with the lead ship (CGC BERTHOLF) scheduled for delivery in spring 2007. The cutter will have a 45 day endurance and 9,000 nm range at economical speed.

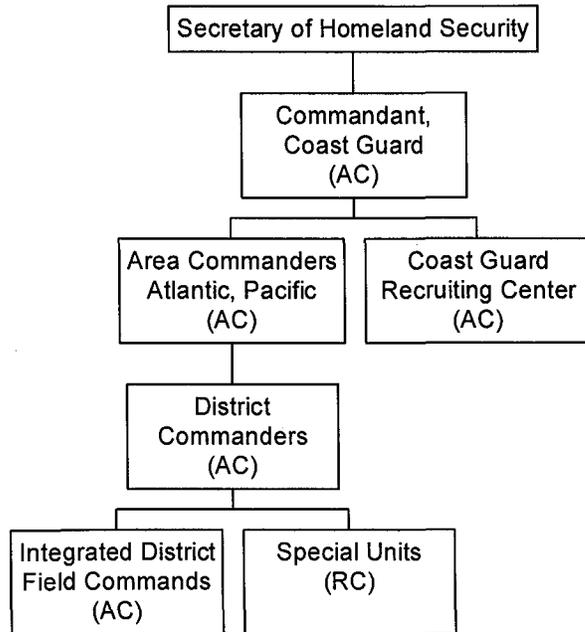
IV. Coast Guard Reserve

Organization: Coast Guard Reserve units are primarily responsible for training individuals to augment Active component units and commands. The Coast Guard Reserve has three deployable port security units, which mobilize as units. The authorized end strength of the Coast Guard Reserve for FY 2004 was 8,100 personnel.

Function and Mission: The function of the Coast Guard Reserve is to provide trained individuals to augment the Active Component, providing a surge capability for both domestic emergencies and maritime operations. The Coast Guard may become part of the Department of the Navy upon mobilization. The multi-mission roles of the Coast Guard Reserve include search and

rescue, combating major oil spills, drug interdiction, protecting ports and waterways, and conducting numerous other maritime operations.

Coast Guard Reserve Command and Control



Note: AC = Active command
RC = Reserve command

APPENDIX A

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APPENDIX B

Abbreviations and Acronyms

A

| | |
|---------|---|
| AA | Attack (Aircraft) |
| AASLT | Air Assault |
| AAV | Amphibious Assault Vehicle |
| AAW | Anti Air Warfare |
| AAWC | Anti Air Warfare Commander |
| ABCCC | Airborne Battlefield Command And Control Center |
| ABN | Airborne |
| ABW | Air Base Wing |
| ACC | Air Combat Command Air Component Commander |
| ACE | Aviation Combat Element |
| ACF | Air Contingency Force |
| ACFT | Aircraft |
| ACR | Armored Cavalry Regiment. Three Squadrons With Tanks, Artillery, Attack Helicopters, Bradleys, Combat Service Supt. |
| ACW | Air Control Wing |
| ADA BDE | Air Defense Brigade (Hawk, Patriot) |
| AE | Ammunition Ship |
| AEF | Air and Space Expeditionary Force |
| AETF | Air and Space Expeditionary Task Force |
| AFB | Air Force Base |
| AFS | Combat Stores Ship |
| AGS | Armored Gun System |
| AGF | Fleet Commander Flagship |
| AI | Air Interdiction |
| ALCM | Air Launched Cruise Missile |
| ALO | Air Liaison Officer |
| AMC | Air Mobility Command |
| AMRAAM | Advanced Medium Range Air To Air Missile |
| AMW | Amphibious Warfare Air Mobility Wing |
| AO | Fleet Oiler (Ship) |
| AOA | Amphibious Objective Area |
| AOE | Fast Combat Support Ship |
| AOR | Area Of Responsibility |
| APAM | Anti Personnel, Anti Material |
| AREC | Air Resource Element Coordinator |
| ARG | Amphibious Readiness Group |
| ARS | Salvage Ship |
| ARTY | Artillery |
| ARW | Air Refueling Wing |

| | |
|---------|-------------------------------------|
| AS | Submarine Tender (Ship) |
| ASOC | Air Support Operations Center |
| ASROC | Anti Submarine Rocket |
| ASUW | Anti Surface Warfare |
| ASUWC | Anti Surface Warfare Commander |
| ASW | Anti Submarine Warfare |
| ASWC | Anti Submarine Warfare Commander |
| ATACMS | Army Tactical Missile System |
| ATF | Amphibious Task Force |
| AVN BDE | Aviation Brigade |
| AW | Airlift Wing |
| AWACS | Airborne Warning And Control System |
| | Air Warning and Control Squadron |

B

| | |
|------|----------------------------------|
| B | Bomber (Aircraft) |
| BBL | Barrel (42 gallons) |
| BCE | Battlefield Coordination Element |
| BDE | Brigade |
| BG | Battle Group |
| BN | Battalion |
| BSSG | Battalion Service Support Group |
| BTRY | Battery |
| BW | Bombardment Wing |

C

| | |
|---------|--|
| C | Transport/Cargo (Aircraft) |
| CA | Civil Affairs |
| CAB | Combat Aviation Brigade |
| CAG | Carrier Air Wing Commander |
| CAOC | Combined Air Operations Center |
| CAP | Combat Air Patrol |
| CAS | Close Air Support |
| CATF | Commander, Amphibious Task Force |
| CCC | Command, Control, Communications |
| CE | Command Element |
| CEC | Cooperative Engagement Concept |
| CEG | Convoy Escort Group |
| CFV | Cavalry Fighting Vehicle (Bradley) |
| CG | Guided Missile Cruiser |
| CGFMF | Commanding General Fleet Marine Force |
| COCOM | Commander In Chief |
| CIWS | Close In Weapon System |
| CLF | Combat Logistics Force Commander, Landing Force |
| CML BDE | Chemical Brigade (None Activated) |

| | |
|--------|--|
| CO | Commanding Officer Company |
| COD | Carrier Onboard Delivery |
| COMINT | Communication Intelligence |
| CONREP | Connected Replenishment |
| CONUS | Continental United States |
| COSCOM | Corps Support Command. Supply & Services Bns, Maintenance Bns, Petroleum Bns, Ammunition Bns, Transportation Bns, Pipeline Companies, Terminal Units. This Organization Provides The Logistics For The Corps And To The Division |
| CRAF | Civil Reserve Air Fleet |
| CRC | Control And Reporting Center |
| CRP | Control And Reporting Post |
| CSAB | Combat Support Aviation Battalion |
| CSSE | Combat Service Support Element |
| CT | Counterterrorism |
| CTE | Commander Task Element |
| CTF | Commander Task Force |
| CTG | Commander Task Group |
| CTU | Commander Task Unit |
| CV | Aircraft Carrier (Conventional Powered) |
| CVN | Aircraft Carrier (Nuclear Powered) |
| CVW | Carrier Air Wing |
| CWC | Composite Warfare Commander |

D

| | |
|---------|---|
| DA | Direct Action |
| DCA | Defensive Counter Air |
| DD | Destroyer |
| DDG | Guided Missile Destroyer |
| DIV | Division |
| DIVARTY | Division Artillery |
| DP ICM | Dual Purpose Improved Conventional Munition |
| DSRV | Deep Submergence Rescue Vehicle |

E

| | |
|----------|------------------------------------|
| E | Electronic Warfare (Aircraft) |
| ECCM | Electronic Counter Countermeasures |
| ECM | Electronic Countermeasures |
| ELINT | Electronic Intelligence |
| ENGR BDE | Engineer Brigade |
| EOD | Explosive Ordnance Disposal |
| ESM | Electronic Support Measures |
| EW | Electronic Warfare (Mission) |

F

| | |
|--------|--|
| F | Fighter (Aircraft) |
| FA BDE | Field Artillery Brigade (46 Artillery Battalions). |
| FAC | Forward Air Controller |
| FACP | Forward Air Control Post |
| FEBA | Forward Edge Battle Area |
| FFG | Guided Missile Frigate |
| FID | Foreign Internal Defense |
| FLIR | Forward Looking Infrared Radar |
| FLOT | Forward Line Own Troops |
| FMF | Fleet Marine Force |
| FSSG | Force Service Support Group |
| FW | Fighter Wing |
| FWT | Fundamental Warfare Tasks |
| FY | Fiscal Year |

G

| | |
|------|------------------------------------|
| GCE | Ground Combat Element |
| GSAB | General Support Aviation Battalion |

H

| | |
|------|---|
| H | Rescue/Medical/General Purpose (Aircraft) |
| HALO | High Altitude Low Open |
| HARM | High Speed Anti Radiation Missile |
| HE | High Explosive |
| HHC | Headquarters & Headquarters Company |

I

| | |
|------|-------------------------------------|
| ICBM | Inter-Continental Ballistic Missile |
| ID | Infantry Division |
| IFV | Infantry Fighting Vehicle (Bradley) |
| INF | Infantry |
| I&W | Indications And Warning |

J

| | |
|--------|---|
| JAOC | Joint Air Operations Center |
| JFACC | Joint Force Air Component Commander |
| JSOC | Joint Special Operations Command |
| JSOTF | Joint Special Operations Task Force |
| JSTARS | Joint Surveillance And Target Attack Radar System |
| JSTPS | Joint Strategic Target Planning Staff |

K

| | |
|----|-------------------|
| KC | Tanker (Aircraft) |
|----|-------------------|

L

| | |
|--------|---|
| LAMPS | Light Airborne Multi Purpose System |
| LAV | Light Armored Vehicle |
| LCAC | Landing Craft Air Cushion |
| LCC | Amphibious Command Ship |
| LCU | Landing Craft |
| LEAP | Lightweight Exo-Atmospheric Projectile |
| LEC | Lamps Element Coordinator |
| LHA | Amphibious Assault Ship (General Purpose) |
| LHD | Amphibious Assault Ship (Multi Purpose) |
| LPD | Amphibious Transport Docks |
| LPH | Amphibious Assault Ship |
| LSD | Dock Landing Ship |
| LT INF | Light Infantry |

M

| | |
|----------|---|
| M | SOF/Mine Countermeasures (Aircraft) |
| MACG DET | Marine Air Control Group Detachment |
| MAG | Maritime Action Group Marine Aircraft Group |
| MAGTF | Marine Air Ground Task Force |
| MAW | Marine Aircraft Wing Medium Anti Tank Assault Weapon |
| MCM | Mine Countermeasures Mine Countermeasures Ship |
| MCS | Mine Countermeasures Command, Control And Support Ship |
| MEB | Marine Expeditionary Brigade |
| MEF | Marine Expeditionary Force |
| MEF(FWD) | Marine Expeditionary Force (Forward) |
| MEU | Marine Expeditionary Unit |
| MEU(SOC) | Marine Expeditionary Unit Special Operations Capable |
| MHC | Mine Hunter Coastal Ship |
| MI BDE | Military Intelligence Brigade |
| MIRV | Multiple Independently Targetable Re-Entry Vehicle |
| MIW | Mine Warfare |
| MLRS | Multiple Launch Rocket System |
| MP BDE | Military Police Brigade |
| MPA | Maritime Patrol Aircraft |
| MPF | Maritime Prepositioning Force Marine |
| MSC | Military Sealift Command |
| MW | Missile Wing |
| M1/M1A1 | Abrams Tank |

N

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|-------|--|
| NALE | Navy Amphibious Liaison Element |
| NEACP | National Emergency Airborne Command Post |
| NEO | Non Combatant Evacuation Operation |
| NSSMS | NATO Sea Sparrow Missile System |
| NSW | Naval Special Warfare |
| NVG | Night Vision Gear |

O

| | |
|--------|-----------------------------------|
| OA | Observation Aircraft |
| OCA | Offensive Counter Air |
| OCONUS | Outside Continental United States |
| OTC | Officer In Tactical Command |

P

| | |
|----------|---|
| P | Patrol (Aircraft) |
| PACAF | Pacific Air Forces |
| PC | Coastal Patrol Boat |
| PERMA | Planning, Embarkation, Rehearsal, Movement, Assault |
| PLT | Platoon |
| POL | Petroleum/Oil/Lubricants |
| PSYOP | Psychological Operations |
| PSYOP BN | Psychological Operations Battalion |

R

| | |
|-------|---------------------------------|
| R | Reconnaissance (Aircraft) |
| RAP | Rocket Assisted Projectile |
| RAOC | Rear Area Operations Center |
| R&D | Research And Development |
| ROC | Required Operational Capability |
| RO/RO | Roll On/Roll Off |
| RPV | Remote Pilot Vehicle |
| RRF | Ready Reserve Force |

S

| | |
|------|---|
| S | Strategic/Search (Aircraft) |
| SAG | Surface Action Group |
| SAR | Search And Rescue Synthetic Aperture Radar |
| SBU | Special Boat Unit |
| SC | Screen Coordinator |
| SDV | Seal Delivery Vehicle |
| SEAD | Suppression Enemy Air Defenses |

| | |
|--------------|--|
| SEAL | Sea, Air And Land |
| SEC | Submarine Element Coordinator |
| SEP ARMD BDE | Separate Armored Brigade (Tanks, Bradleys, Artillery, Engineers, Cmbt Svc Supt.) |
| SEP MECH BDE | Separate Mechanized Infantry Brigade (Bradleys, Tanks, Artillery, Engineers, Cmbt Svc Supt.) |
| SEWC | Space And Electronic Warfare Commander |
| SF | Special Forces |
| SHF | Super High Frequency |
| SIG BDE | Signal Brigade |
| SIGINT | Signal Intelligence |
| SIOP | Single Integrated Operational Plan |
| SM | Standard Missile |
| SOA | Special Operations Aviation |
| SOF | Special Operations Forces |
| SOFLE | Special Operations Forces Liaison Element |
| SOW | Special Operations Wing |
| SP | Self Propelled |
| SPLL | Self Propelled Loaded Launcher |
| SPMAGTF | Special Purpose Marine Air Ground Task Force |
| SR | Special Reconnaissance |
| S&R | Surveillance And Reconnaissance |
| SRBOC | Super Rapid Blooming Overhead Chaff |
| SRIG | Surveillance Reconnaissance And Intelligence Group |
| SSBN | Ballistic Missile Submarine |
| SSN | Attack Submarine |
| STW | Strike Warfare |
| STWC | Strike Warfare Commander |
| SW | Support Wing |

T

| | |
|--------|--|
| T- | Trainer/Tactical (Aircraft) |
| (T) | Towed (Artillery) |
| TACC | Tactical Air Command Center (USMC) Tactical Air Control Center (USAF) |
| TACP | Tactical Air Control Party |
| T-AE | Ammunition Ship (MSC) |
| T-AFS | Combat Stores Ship (MSC) |
| T-AG | Acoustic Research Ship (MSC) |
| T-AGOS | Ocean Surveillance Ship (MSC) |
| TAH | Hospital Ship (MSC) |
| T-AK | Break Bulk Ship (RRF) (MSC) |
| T-AKR | Fast Sealift Ship (MSC) |
| TAKR | RO-RO Ship (RRF) (MPS) |
| T-AO | Oiler Ship(MSC) |
| T-AOT | Transport Oiler Tug(MSC) |
| TAVB | Aviation Logistics Support Ship |

| | |
|------|--|
| TBMD | Theater Ballistic Missile Defense |
| TLAM | Tomahawk Land Attack Missile |
| TOW | Tube Launched, Optically Tracked, Wire Guided Anti-Tank Missile System |
| TRAP | Tactical Recovery Of Aircraft & Personnel |
| TST | Time Sensitive Target |

U

| | |
|-------|---|
| U | Utility (Aircraft) |
| UAV | Unmanned Aerial Vehicle |
| UCMJ | Uniformed Code Of Military Justice |
| UHF | Ultra High Frequency |
| UNREP | Underway Replenishment (Connected & Vertical) |
| URG | Underway Replenishment Group |
| USAFE | U.S. Air Force In Europe |
| UW | Unconventional Warfare |

V

| | |
|---------|------------------------------------|
| VERTREP | Vertical Replenishment |
| VLS | Vertical Launch System (Missiles) |
| VSTOL | Vertical/Short Takeoff And Landing |

W

| | |
|------|-------------------------------------|
| W | Weather (Aircraft) |
| WAGB | Polar Icebreaker (USCG Ship) |
| WHEC | High Endurance Cutter (USCG Ship) |
| WLB | Buoy Tender (USCG Ship) |
| WMEC | Medium Endurance Cutter (USCG Ship) |
| WOC | Wing Operations Center |
| WPB | Patrol Boat (USG) |
| WTGB | Icebreaking Tug (USCG) |

X

| | |
|----|-------------------------|
| X | Experimental (Aircraft) |
| XO | Executive Officer |

Y

| | |
|----|-----------------------|
| YA | Supersonic (Aircraft) |
|----|-----------------------|