

Appendix A

CORPS TASK ORGANIZATION AND PLANNING CONSIDERATIONS

To make accurate decisions, commanders and staff officers must have a firm understanding of the capabilities, limitations, and employment considerations of organic and supporting friendly forces. Commanders and staffs can use the information in this appendix for preliminary planning. They can also use this information to understand and apply various corps assets to the battlefield. This appendix provides generic planning considerations by service and specialty.

CORPS TASK ORGANIZATION CONSIDERATIONS

Although situation-dependent, division (as well as separate brigade and ACR) commanders can expect to receive a portion of the corps' assets to accomplish their assigned missions. A commander of a committed division may receive the following additional support depending on METT-T factors:

- Additional maneuver units (an ACR, a separate brigade, an AH battalion, or a ground maneuver brigade from another division within the corps).
- Air defense artillery assets (an ADA battalion or ADA batteries of guns and/or short-range missiles).
- Chemical assets.
- Engineer assets (an engineer battalion or an engineer group with attached engineer battalions or companies and a bridge company).
- Field artillery assets (an FA brigade with an appropriate mix of FA units).
- Military intelligence assets.
- Military police assets (an MP company).
- Psychological operations assets.
- Signal assets as required to support task organization (a node center or extension switch).
- Civil affairs assets (a CA battalion with both financial specialists and generalists).

- Corps support command assets as required to support task organization, including the following corps support depending on METT-T factors:
 - A DS maintenance company.
 - Missile maintenance support.
 - Aircraft maintenance support.
 - A surgical team.
 - An air ambulance.
 - Transportation.
 - Mortuary affairs.
 - Ammunition support.
 - Port/airfield clearance.
 - A field services company.
- Other combat support (a command aviation company of the corps aviation brigade) and CSS assets (a transportation company) as required.
- Close air support allocation and priority of effort (time, location, target type, or situational considerations).
- Priority of corps GS assets.
- Naval surface fire support and ANGLICO assistance.

A commander of an uncommitted division may receive, with the exception of FA, MP, and CAS

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allocations, the same type of corps augmentation, although allocated units may be smaller. When a previously uncommitted division becomes committed, the corps organization for combat, or a revised or phased task organization, will redistribute the available corps assets and priorities to support mission accomplishment by the division. The command and support relationships of assets allocated to either committed or uncommitted divisions depend on the situation and are designed to meet the specific missions of the division.

CORPS PLANNING CONSIDERATIONS

US Air Force

Theater Air Control

Apportionment—

- Determines how and where to use combat air capabilities.
- Joint force commander assigns a percentage or priority of combat air effort to the various air operations (AI, counter air, CAS).
- Air reconnaissance is generally not apportioned.

Allocation—

- Translates the JFC's apportionment decision into sortie numbers (by type aircraft) available for each operation or task.
- Is the responsibility of the ACC.

Distribution of CAS among the subordinate land maneuver units is conducted by the LCC .

Allotment—

- Is the responsibility of the ACC and must meet the JFC's apportionment and intent.
- Is used in NATO to assign individual aircraft to combined air operations centers (CAOCs) to carry out JFC objectives.
- Is usually accomplished by entire squadrons assigned for a specific period of time (for example 24 hours) or for a particular mission (such as a deep strike).

Counter Air

Counter Air—

- Objective is to gain control of the aerospace environment to achieve air supremacy.
- Operations protect friendly forces, ensure freedom to perform other missions, and deny that freedom of use to the enemy.
- Is conducted in a manner or at a distance to render unnecessary detailed integration with fires and the movement of friendly ground forces.
- Is consistent with the JFC's objectives, and may initially involve the highest priority of all air operations.
- Performs offensive, defensive, and SEAD operations.
- Air component commander determines ratio of forces assigned between counter air operations based on—
 - JFC guidance.
 - Level of enemy air threat.
 - Vulnerability of friendly forces to air attack.
 - Enemy AD capability.

Offensive Counter Air (OCA)—

- Operations are essential to gaining air superiority and should be conducted at the start of hostilities to seize the offensive.
- Are typified by attacks against—
 - Command and control facilities.
 - Munitions and missile storage sites.
 - Aircraft on the ground or in the air.
 - Any target that contributes to the enemy's air power capability.

Defensive Counter Air (DCA)—

- Operations detect, identify, intercept, and destroy enemy air power attempting to attack friendly forces or penetrate friendly airspace.
- Initially may be the mission of emphasis if the enemy has seized the initiative through surprise or friendly political constraints.

- Involves active measures such as using combat fighter aircraft and air defense artillery.
- Involves passive measures, such as—
 - Not involving weapons systems.
 - Radar coverage for early warning.
 - Protective construction (for example, hardened sites).
 - Cover, camouflage, deception, dispersion, and frequent movement of personnel and equipment.

SEAD, J-SEAD, and Air Interdiction

Suppression of Enemy Air Defenses (SEAD)—

- Operations neutralize, destroy, or temporarily degrade enemy AD systems.
- Goal is to allow friendly aviation forces to effectively perform other missions without interference from enemy air defense.

Joint Suppression of Enemy Air Defenses (J-SEAD)—

- May be part of SEAD operations; land force surface-to-surface weapons will complement these efforts.
- Is conducted by the ACC at the theater level against surface-to-air defense systems.
- Are planned and conducted in localized areas by battalion and larger land units to protect aviation and friendly aircraft; localized J-SEAD operations can use FA, attack helicopters, direct fire weapons, and EW.

Air Interdiction (AI)—

- Delays, disrupts, or destroys the enemy's potential before he can use it effectively against friendly forces.
- May—
 - Reduce the enemy's capability to mount an offensive.
 - Restrict the enemy's freedom of action and increase vulnerability to friendly attack.
 - Prevent the enemy from countering an increase in friendly strength.

– Reduce the enemy's battlefield reserves.

- Attacks are normally executed by the ACC as part of a systematic and persistent campaign in support of the JFC's strategy.
- Includes actions against land force targets nominated by the LCC or the Army corps, which are in a position to have a near-term effect on the corps battle but are not yet in close proximity to ground forces.
- Targets are nominated by corps commanders and are prioritized according to nominations of all corps/service components in theater and the JFC's objectives.
- Requires joint coordination during planning.

Close Air Support, Reconnaissance and Surveillance, and Airlift

Close Air Support (CAS)—

- Are attacks against hostile surface forces that are in close proximity to friendly forces and which require detailed integration into the supported commander's scheme of fire and maneuver.
- To be successful, must be responsive to the ground commander's needs.
- Enhances surface force operations by providing the capability to deliver a wide range of weapons and massed firepower at decisive points.
- Is conducted—
 - To blunt an enemy attack on a friendly position.
 - To help obtain and maintain the land offensive.
 - To provide cover for friendly movements.
- Targets are selected by the ground commander.
- Is planned, directed, and controlled by elements of the theater air control system.

Reconnaissance and Surveillance—

- Objectives are to collect information from airborne, orbital, and surface-based sensors to identify the enemy's composition, capability, and intent.

- S2/G2 normally handles preplanned requests for aerial reconnaissance; the appropriate TACP handles immediate requests.

Airlift—

- Objectives are to deploy, employ, and sustain military forces by the timely movement, delivery, and recovery of personnel and equipment.
- Through mobility operations, allows the JFC to maneuver fighting forces to exploit an enemy's weakness.
- May be categorized as either strategic or theater; corps requests—
 - For strategic airlift are handled through TRANSCOM channels.
 - For theater airlift are handled through Army logistic channels, with variations for the immediacy of the request.
 - For when movements are known or projected in advance, are handled as planned requests through normal logistic channels as part of the JMC's daily airlift allocation.
 - For when air movement requirements are identified too late for normal coordination, are handled as immediate.
 - Once identified by the Army, are transmitted directly to the AOC, normally by a TALO.

Airspace Command and Control

Coordinating Altitude—

- Is a procedural method to separate fixed-wing and rotary-wing aircraft.
- Is determined by the theater airspace control authority (ACA).
- Normally extends from the corps rear boundary to the FLOT.
- May extend forward of the FLOT.

Airspace Restricted Area—

- Is also known as the restricted operations area (ROA) and/or restricted operations zone (ROZ).
- Is normally activated for DZs, ADA weapons-free zones; and so on.

- Requests are sent through A²C² facilities to the ACA.

Minimum-Risk Route (MRR)—

- At NATO is known as the low-level transit route (LLTR).
- Represents minimum hazard to friendly USAF aircraft transiting a specific area.
- Is recommended by the corps and sent through the LCC to the ACA.
- Normally begins at the corps rear boundary and ends at the FSCL.
- Should be changed frequently to prevent enemy exploitation.
- May extend below the coordinating altitude to increase aircraft survivability.
- Should be active in the corps at any onetime with several inactive alternates.
- Must avoid areas where intense ground combat is projected and where there will be areas of high airspace use, such as—
 - Field artillery areas.
 - Air defense areas.
 - Drop zones.
 - Army aviation operations areas.

High-Density Airspace Control Zone (HIDACZ)—

- Is requested by the maneuver force commander (division or higher).
- Restricts airspace from users not involved with maneuver force commander's operation.
- Returns ADA weapons control authority (within the HIDACZ) to the maneuver force commander.
- Requires ACA approval.

**US Navy and US Marine Corps
Naval Surface Fire Support Considerations**

Air and Naval Gunfire Liaison Company (ANGLICO)—

- Is a USMC unit specifically designed for support of division-size units.

- Provides control and liaison for the employment of naval surface fire support and USN and USMC close air support.
- Is normally attached to a US Army division for a specific operation.

Tactical Missions include—

- Direct support; for example—
 - A ship in direct support (normally to a battalion) delivers both planned and call-fire missions.
 - Call-fires are requested and adjusted by a shore fire control party of the supported unit or by an air spotter.
- General support; for example—
 - Is assigned to ships supporting units of brigade size or larger.
 - Normally has an air observer who adjusts the fires of a GS ship or it has an LNO who assigns the fires of the ship to a battalion shore fire control party.

Capabilities include—

- Selection of the most favorable gun-target line within the limits imposed by hydrography.
- High rates of fire.
- Accuracy.
- A variety of weapons and munitions.
- High initial velocity and flat trajectory for direct fire against fortifications.

Limitations include—

- Ship/shore communications dependent on radio transmission.
- Changing gun-target lines when the ship is under way.
- Inaccuracies in unobserved fires and initial salvos in areas where navigational aids are lacking or obscured by poor visibility (employing radar beacons ashore can minimize this).
- Limited magazine capacity of fire support ships.
- Firing positions possibly limited by unfavorable hydrographic conditions or the presence of mines.

- Flat trajectories that are relatively unsuitable for the attack of targets in defiladed positions and that restrict the attack of targets close to front-line troops when the gun-target line passes over friendly troops.
- The fact that the dispersion Pattern of the naval gun is elliptical with the long axis of the pattern along the direction of fire; however, this pattern—
 - Can be particularly effective when fire can be brought to bear on the long axis of an enemy target.
 - Allows fire to be brought close to friendly front lines when the gun-target line parallels those lines.

NOTE: See also Figure A-1.

Supporting Naval Air Missions and Tasks

Strike Warfare includes—

- Close air support.
- Offensive counter air.
- Interdiction.

Antisurface Warfare includes—

- Convoy and shipping protection.
- Antiinvasion operations.
- Antishipping operations and embargo.
- Antisurface action group operations.
- Protection against small boat and terrorist attack.

Antisubmarine Warfare includes attack of submarines and support assets.

Antiair Warfare includes defensive counter air.

Mine Warfare includes—

- Offensive sea mining.
- Defensive operations (mine countermeasures).

Reconnaissance includes—

- Area search.
- Shadowing and surveillance.
- Reconnaissance sweep.
- Postattack reconnaissance and BDA.

SHIP (1)	WEAPONS	MAXIMUM RANGE
Destroyer (2)	5-inch guns	24 km
Guided missile cruiser (3)	5-inch guns	24 km
Guided missile destroyer	5-inch guns	24 km

NOTES:

1. Some naval vessels have tactical land attack missile (TLAM) capability. The theater CINC controls TLAM, and he may allocate TLAM to support a JFC's OPLAN.
2. The destroyer is the most available ship for naval surface fire support and is usually assigned in direct support of a battalion.
3. The guided missile cruisers are primarily assigned an antiair warfare mission. Guided missiles are not considered suitable in the surface fire support role.

Figure A-1. Surface fire support ships

- Armed reconnaissance.
- Electronic order of battle collection.

Command, Control, Communications, and Intelligence (C³I) includes—

- Airborne early warning.
- Strike coordination.

Electronic Warfare includes—

- Electronic attack.
- Electronic warfare support measures.
- Electronic protection.

Suppression of Enemy Air Defenses includes—

- Attack of enemy C³I.
- Strike support and protection.

Logistics includes—

- Carrier onboard (COB) delivery.
- Aerial refueling.

Search and Rescue includes—

- Fleet search and rescue.
- Combat search and rescue.

Fleet Marine Forces (FMF)

The largest portion of USMC operating forces are located within fleet marine forces. They are integral

parts of the US fleets and are subject to the respective fleet commanders' OPCON.

There are three types of organizations within each FMF: Marine divisions (MARDIVs), Marine aircraft wings (MAW), and force service support groups (FSSG). Elements of the FMFs are task-organized into Marine air-ground task forces (MAGTFs) for combat operations.

Marine Air-Ground Task Forces (MAGTFs)—

- Are combined-arms forces, under the direction and control of a single commander, consisting of ground, air, and CSS elements capable of operating as independent units or as part of a joint or combined task force.
- Include four major elements:
 1. A command element (CE) that provides a single headquarters for command and coordination of ground, air, and CSS forces.
 2. A ground combat element (GCE) task-organized to conduct ground operations and constructed around an infantry unit varying in size from a reinforced infantry battalion to a reinforced MARDIV.
 3. An aviation combat element (ACE) task-organized to provide all or a portion of the functions of USMC aviation (normally one per MAGTF).
 4. A combat service support element (CSSE) task-organized to provide the MAGTF with the

HEADQUARTERS		
Reinforced Squadron	Battalion Landing Team	MEU Service Support Group
AIRCRAFT/LAUNCHERS	MAJOR GROUND COMBAT EQUIPMENT	
4 CH-53D/E	5 Tanks	8 155-mm Howitzers
12 CH-46	8 81-mm Mortars	9 60-mm Mortars
3 UH-1	32 Dragon Trackers	20 50-cal Machine Guns
6 AH-1	8 TOW Launchers	60 M-60 Machine Guns
6 AV-8B	12 AAV	26 MK-19 40-mm Grenade Launchers
5 Stinger Teams	5-9 LAV	
PERSONNEL		
USMC: 1,900		
USN: 100		

NOTE: Actual task organization formed to accomplish specific missions may vary from the organization shown.

Figure A-2. Marine expeditionary unit (MEU)

logistic support necessary to accomplish the MAGTF mission.

The CEs of all the MAGTFs are always staffed. The MAGTFs are only “fleshed out” with a GCE, an ACE, and a CSSE for a specific deployment, exercise, or contingency.

There are three basic types of MAGTFs—the Marine expeditionary unit (MEU), the Marine expeditionary brigade (MEB), and the Marine expeditionary force (MEF). Command elements have been established for 6 MEUs, 6 MEBs, and 3 MEFs. The MAGTFs are task-organized according to the following operational requirements:

- The Marine expeditionary unit (MEU) (Figure A-2)---
 - Which is the most responsive but has the least combat power of all MAGTFs.
 - Which, while normally sea-based aboard from three to five Navy amphibious ships, may be airlifted.
 - Is continuously deployed in the Mediterranean Sea and Pacific Ocean, although it periodically deploys to the Atlantic and Indian Oceans and to the Caribbean Sea for operations of short duration.
- Is composed of—
 - Approximately 2,000 personnel.
 - ACE commanded by a colonel.
 - A GCE battalion landing team (BLT) consisting of an infantry battalion, reinforced by tank, antiarmor, artillery, reconnaissance, assault amphibious vehicle, and combat engineer units.
- An ACE consisting of a helicopter squadron (reinforced) containing four types of rotary-wing aircraft and fixed-winged vertical short takeoff/landing (VSTOL) aircraft/Avenger (AV) 8-B.
- A CSSE, which can provide 15 days of CSS before requiring resupply.
- The Marine expeditionary brigade (MEB) (Figure A-3)—
 - Capable of forward-deploying aboard naval amphibious ships but which will normally be found forward-deployed ashore.
 - Requires from 26 to 32 USN amphibious ships to deploy.
 - May be airlifted.

BRIGADE HEADQUARTERS (1)			
Marine Aircraft Group		Regimental Landing Team	Brigade Service Support Group
AIRCRAFT/LAUNCHERS (2)		MAJOR GROUND COMBAT EQUIPMENT	
20 AV-8B	24 CH-53D	30 Tanks (3)	30 155-mm Howitzers (Towed)
24 F/A-18	12 CH-46	24 81-mm Mortars	27 60-mm Mortars
8 UH-1	5 EA-6	96 Dragon Trackers	138 50-cal Machine Guns
18 AH-1	47 AAV	72 TOW Launchers	255 M-60 Machine Guns
13 KC-130		109 AAV	114 MK-19 40-mm Grenade Launchers
8 Hawk Launchers		25 LAV	
45 Stinger Teams			
PERSONNEL			
USMC: 16,000			
USN: 700			

NOTES:

1. Actual task organization formed to accomplish specific missions may vary from the organization shown.
2. The aviation force shown equals approximately one-third of the total active aviation force assets. This force is not ideal (for example, 24 attack helicopters are the recognized minimum to properly support a MEB).
3. Tanks increase to 58 in FY 96.

Figure A-3. Marine expeditionary brigade (MEB)

- Has more combat power than a MEU.
 - Currently transitioning to a MEF (forward) structure.
 - Is composed of—
 - Approximately 16,000 personnel.
 - ACE commanded by a brigadier general.
 - A GCE regimental landing team (RLT) consisting of an infantry regiment, reinforced by an artillery battalion, tank company, combat engineer company, reconnaissance company, assault amphibian vehicle company, light armored vehicle company, and TOW platoon.
 - An ACE consisting of a Marine aircraft group (MAG) (reinforced) containing fixed- and rotary-wing aircraft; command, control, and air defense elements; and an air field support detachment.
 - Is the largest and most combat capable of the three MAGTFs.
 - Is capable of a broad spectrum of amphibious operations and subsequent operations ashore.
 - Takes from 60 to 70 USN amphibious ships to deploy a MEF.
 - May be forward-deployed aboard naval amphibious ships but will normally be found forward-deployed ashore.
 - Is composed of—
 - Approximately 53,000 personnel.
 - A CE commanded by a major general or lieutenant general.
 - A GCE that is normally a MARDIV (reinforced).
 - An ACE consisting of a task-organized MAW that may include elements of other aircraft wings for additional combat power.
 - A CSSE that is normally an FSSG or FSSG (reinforced) and that provides up to 60 days logistic support before resupply is required.
- A CSSE capable of providing 30 days combat support to a MEB before resupply is required.
- The Marine expeditionary force (MEF) (Figure A-4)—

FORCE HEADQUARTERS (1)		
Marine Aircraft Wing	Reinforced Division	Force Service Support Group
AIRCRAFT/LAUNCHERS (2)		MAJOR GROUND COMBAT EQUIPMENT
40 AV-8B	16 CH-53E	70 Tanks
48 F/A-18	32 CH-53D	72 81-mm Mortars
20 F/A-18D	60 CH-46	288 Dragon Trackers
8 EA-6	24 UH-1	144 TOW Launchers
19 F/A-18D	24 AH-1	208 AAV
12 KC-130	12 OV-10	147 LAV
12 Hawk Launchers		
75 Stinger Teams		
		90 155-mm Howitzers
		18 155-mm Howitzers (Self-Propelled)
		81 60-mm Mortars
		435 50-cal Machine Guns
		601 M-60 Machine Guns
		345 MK-19 40-mm Grenade Launchers
		PERSONNEL
		USMC: 49,700
		USN: 2,600

NOTES:

1. Actual task organization formed to accomplish specific missions may vary from the organization shown.
2. The aviation force shown equals approximately one-third of the total active aviation force assets. This force is not ideal (for example, attack helicopters are the recognized minimum to properly support a MEF).

Figure A-4. Marine expeditionary force (MEF)

US Army

The corps does not have a standard organization structure. Figure A-5 shows a typical corps organization. Most corps will have a similar structure, although the specific number, size, and types of units will vary. This section discusses some of the key corps units.

- Provides ADA protection from all types of airborne threats at all altitudes to critical corps assets and maneuver forces.
- Operates during all types of weather both day and night.
- Simultaneously engages multiple targets.
- Functions effectively in an intense electronic countermeasures (ECM) environment.

Corps ADA Brigade

The Corps Patriot Battalion—

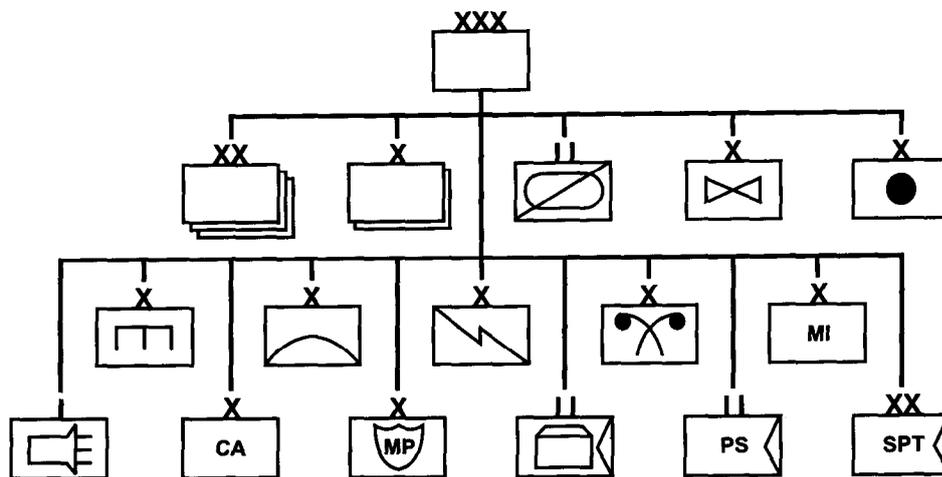


Figure A-5. Typical corps organization

WEAPON	SYSTEM	SLANT RANGE	LAUNCHERS/BN	LOCATION (note)
HIMAD	Hawk	40 km	24/Corps Bn	Corps or Division Area
	Patriot	50 km	48/Corps Bn	Corps or Division Area
FAAD	Avenger	4 km	54/Avenger Bn	Corps, Division, or Brigade Rear Area

NOTE: May provide area AD coverage or may be employed to provide a point defense of critical assets.

Figure A-6. Corps air defense resources

- Presents a significant electronic, visual, and infra-red signature.
- Requires extensive logistic support for fuel and missile resupply.
- Establishes launch capability in approximately 30 minutes after movement.

The corps has OPCON of the corps ADA brigade, but the ADA brigade and the Patriot battalion must be employed under weapons control procedures and measures of the AADC. However procedures and measures must support the corps commander's concept of operations and still complement the theater AD mission. (See Figures A-6 and Figure A-7.)

The Corps Hawk Battalion (National Guard)—

- Is only fielded in NG units.
- Provides low- to medium-altitude air defense of corps assets against the air-breathing threat.
- Operates during all types of weather both day and night.

- Functions effectively in an intense ECM environment.
- Presents a significant electronic, visual, and infra-red signature.
- Requires extensive logistic support for fuel and mis~ile resupply.
- Establishes launch capability in approximately 45 minutes after movement.

The corps has OPCON of the corps ADA brigade, but the ADA brigade and the Hawk battalion must be employed under weapons control procedures and measures of the AADC.

The Corps Chaparral Battalion (National Guard)—

- Provides air defense of corps assets against low-altitude air attacks.
- Batteries are mobile and can engage hostile aircraft at night and during some periods of limited visibility.
- Provides little armor protection for crew and material.

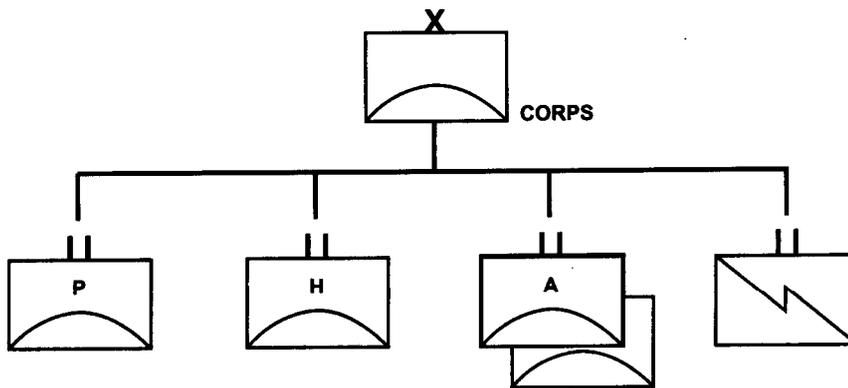


Figure A-7. Corps air defense brigade organization

- Carrier must be stationary for firing.
- Targets must be visually acquired, identified, and tracked before engagement.
- Smoke signature generated during missile firing may reveal the weapon's location or the location of other corps assets.

The Corps Avenger Battalion—

- Conducts counter-threat RISTA efforts in the forward area with priority to UAVs, rotary-wing aircraft, and fixed-wing leakers.
- Provides FAAD protection for maneuver forces, LOCs, critical assets, choke points, and reserves.
- Supports both offensive and defensive operations.
- Has day or night engagement capability.
- Has shoot-on-the-move capability.
- Gunner must visually identify aerial platform.

Corps Aviation Brigade

The Attack Helicopter Battalion—

- Provides attack helicopter units for rapid employment as part of a combined arms team to destroy enemy forces.
- Is employed as a battalion-size unit only.
- Is employed in mass for maximum effectiveness.
- Offensive effectiveness is greatest against enemy forces in the open, on the move, and in exploitation and pursuit operations.
- Requires detailed planning and extensive coordination, particularly for cross-FLOT operations (must consider risk versus payoff).
- Is OPCON when reinforcing a forward division (the best command relationship).
- Should locate Classes III and V forward to reduce turnaround time and to increase time available in the target area.

The Assault Helicopter Battalion—

- Conducts air assault operations.
- Can air assault an infantry battalion in one lift (when UH-60 equipped).

- Is normally used in a DS role.
- Can perform resupply missions in support of FARPs and cross-FLOT operations.
- Can have a turnaround time of as much as 2 hours for a 75-kilometer cross-FLOT insertion.
- Must include security of the force in planning.
- Conducts air movement operations.
- Provides emergency aeromedical evacuation but has no medical personnel unless augmented.

The Medium Helicopter Battalion—

- Moves personnel, supplies, and equipment in support of corps operations.
- Can air assault an infantry battalion in one lift.
- Provides combat support of fast-paced operations, such as exploitations and pursuits.
- Moves critical supplies and equipment and provides mass casualty evacuation.

The Command Aviation Battalion—

- Provides C² and communications aircraft support to the corps.
- Provides reconnaissance and time-critical communications satellite (COMSAT) information in support of corps operations.

The Combat Support Aviation Battalion—

- Conducts air movement operations.
- Conducts air assault operations.
- Provides emergency aeromedical evacuation (however, it has no medical personnel unless augmented).
- Moves personnel, supplies, and equipment in support of the corps, subordinate divisions, as well as the corps AVIM battalion and organic attack battalions.

The Light Utility Helicopter Battalion—

- Moves personnel, supplies, and equipment in support of corps and subordinate divisions.
- Allows autonomous operations and simple task-organization within any of the supported division aviation brigades because of the modular design of each company.

- Provides emergency aeromedical evacuation (however, it has no medical personnel unless augmented).
- Conducts air movement operations.

NOTE: See also Figures A-8 and A-9.

Corps Chemical Brigade and Battalion

The Headquarters and Headquarters Company (HHC), Chemical Brigade—

- Provides C² for two or more chemical battalions.
- Normally is the only one assigned to the corps.

The Headquarters and Headquarters Detachment (HHD), Chemical Battalion—

- Provides C² for from three to seven chemical companies (NBC reconnaissance, decontamination, mechanized smoke/decontamination, and biological detection).
- Is normally assigned to a corps.

The Chemical Company (Decontamination)—

- Provides NBC equipment decontamination support to the corps.
- Operates up to five equipment decontamination sites, each capable of decontaminating approximately 52 vehicles per day.
- Normally has two assigned to a corps; one per heavy division.

The Chemical Company (Reconnaissance)—

- Provides NBC motorized reconnaissance support to the corps.
- Normally has only one assigned to a corps.

The Chemical Company (Smoke/Decontamination)—

- Provides NBC equipment and smoke support to a light infantry division.
- Has four platoons, each able to provide either of the following:
 - Two smoke sites with smoke support 1.7 kilometers wide.
 - Two operational decontamination sites.
 - One thorough decontamination site.

- Is assigned to the corps; one per light division.

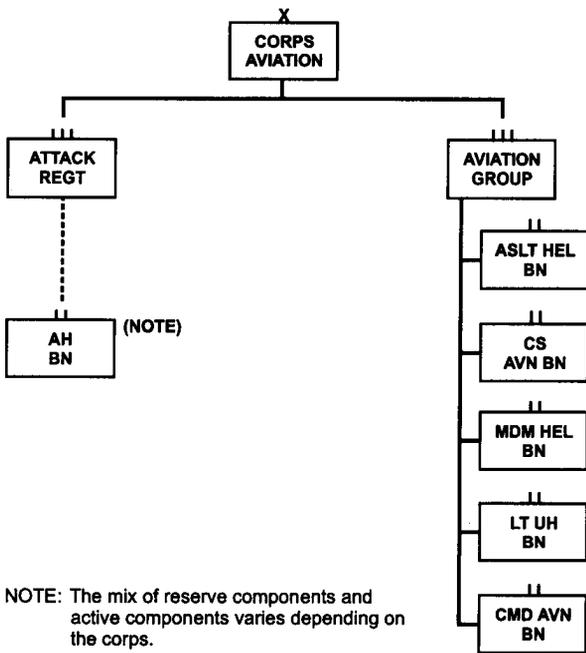
The Chemical Company (Smoke Generator) (Motorized)—

- Provides smoke support to the corps.
- Provides two platoon smoke sites with a smoke width of 3.4 kilometers per platoon or one company site 6.8 kilometers wide.
- Normally has four or more companies assigned to a corps.

The Chemical Company (Smoke Generator) (Mechanized)—

- Provides smoke support to the corps.
- Provides three platoon smoke sites with a smoke width of 1.3 kilometers per site or one company site 3.7 kilometers wide.
- Is assigned to the corps; one per heavy division.

NOTE: See also Figure A-10.



NOTE: The mix of reserve components and active components varies depending on the corps.

Figure A-8. Corps aviation brigade

Type Aircraft	Weapon System (1)	Range (m)	Endurance (hr:min)	Average Speed (2) (knots)	Maximum Load
AH-1F	TOW (8 each) 2.75-in Rockets Hydra 70 Rockets 20-mm Cannon	3,750 6,000 8,800 1,500	2:00	100	
AH-64A (3)	Hellfire (16 each) Hydra 70 Rockets 30-mm Cannon	8,000 8,800 3,000	1:45 3:15 (4)	140	
UH-1H			2:00	90	2,000 lbs or 1-Inf Squad
UH-60A UH-60L			2:00	145	6,000 lbs or 1-Inf Squad 8,000 lbs
CH-47D Platoon			3:00	140	20,000 or 1-Inf Platoon
OH-58C	Stinger		2:45	90	
OH-58D(5)	Hellfire (4 maximum) Hydra 70 Rockets 50-cal Machine Gun (1) Stinger (4 maximum)	8,000 8,800 2,000 5,000	2:00	100	

NOTES:

1. Can be armed with any system or combination if maximum rounds are reduced.
2. Low-level flight for planning route to and from target and/or LZ area. Nap of the earth (NOE) flight speed averages 35 knots (65 kph).
3. AH-64 is capable of operating in limited visibility and at night.
4. When fitted with one auxiliary 230-gallon fuel tank.
5. Kiowa Warrior is an armed version of the OH-58D. It can be fitted with a combination of weapons, but it only has two weapons pylons.

Figure A-9. Corps helicopter resources

Chemical Decontamination Considerations include—

- Principles and considerations:
 - As soon a possible.
 - Only that which is necessary.
 - By priority.
 - Cost and benefit of decontamination operations versus natural weathering and decay.
 - Availability of water and hours of darkness for decontamination.
- Vulnerable areas for persistent agents:
 - Enemy observation posts (OPs) and artillery.
 - Critical targets damaged by high explosives (HE) to delay recovery or repair.
 - Enemy fire support C².
 - Logistic areas and reserve and staging areas.
 - Second-echelon forces, airfields, ports.
- Equipment decontamination planning times:
 - Operational: 2 minutes per vehicle.
 - Thorough: 90 minutes first vehicle; 10 minutes per vehicle thereafter.
 - Limited night capability.
 - Availability of water.

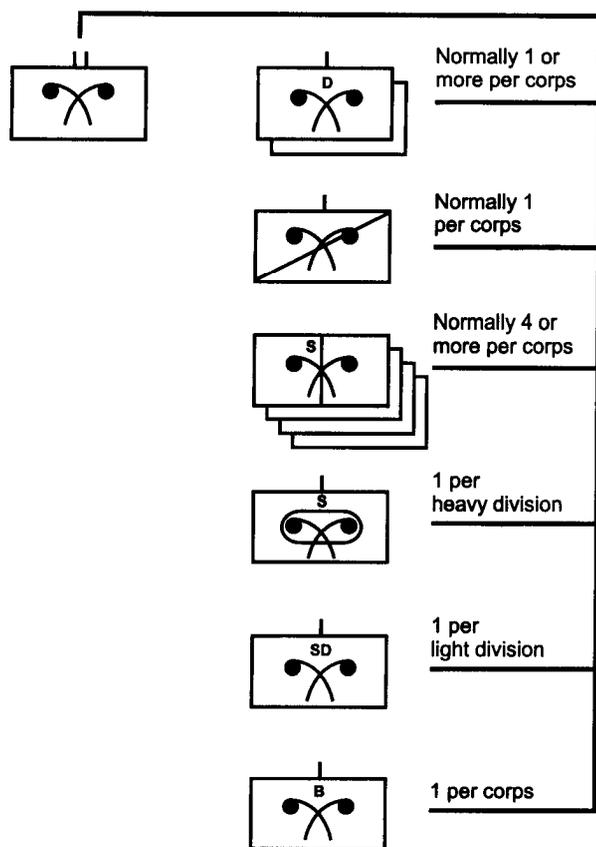


Figure A-10. Corps chemical brigade organization

- Joint and combined considerations:
 - Apprise the support command of NBC warfare requirements for inclusion in the TPFDL.
 - Coordinate with HN, allied, and other component commanders as to their NBC defense and smoke capabilities.
 - Coordinate joint chemical warfare request procedures (CWRP).
 - Check interoperability of NBC reports, alarms, and warnings.
 - Recommend task organization and priorities for NBC defense and smoke support.
 - Exchange NBC SOPs.

Chemical Smoke/Obscurants Considerations include—

- Wind speed and direction, temperature gradient.

- Coverage of static logistic activities.
- Mobility/survivability of motorized versus mechanized units.
- Impact of dust, fog, snow, and rain.
- Visibility:
 - Smoke haze: From 50 to 150 meters.
 - Smoke blanket: 50 meters.
- Effect on both friendly and enemy electro-optic systems and smart weapons.
- Effect on C².
- Countermeasures.

Chemical Protection Considerations include—

- Individual: Service NBC attack.
- Unit: Accomplish missions under NBC conditions.

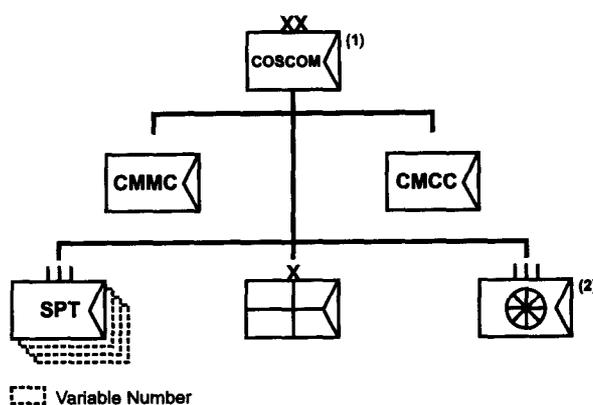
Chemical Contamination Avoidance Considerations include—

- Implement passive defensive measures.
- Warn and report NBC attacks.
- Locate and identify NBC hazards.
- Limit exposure to NBC hazards.

Corps Combat Service Support

Corps Support Command. The COSCOM coordinates logistic elements in support of corps forces or the current operational plans of unified or joint commands. It organizes different types of logistic units into a support package to meet the mission requirements of the supported force. The COSCOM's organization is METT-T dependent and is tailored to perform CS, CSS, maintenance support, transportation support, and CHS (Figure A-11).

Corps Support Group (CSG) (Forward). A forward CSG consists of multifunctional CSBs that have no fixed structure. Each CSB consists of a headquarters and required functional companies. One CSB in each forward CSG supports nondivision troops in the division area. Other CSBs of the forward CSG are normally behind the division rear boundary (Figure A-12). They provide—



NOTES:

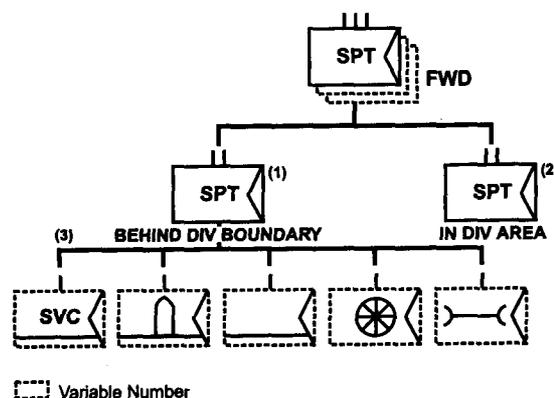
1. Chemical units, CA units or a CA battalion and PSYOP units may be attached to the corps or the COSCOM.
2. Assigned if three or more functional transportation battalions are included in the force structure.

Figure A-11. Corps support command organization

- Direct support to nondivision units in their area as well as GS supply, backup maintenance, and field services to the division.
- Logistic support (less personnel, finance, and CHS) to nondivision forces operating in a division area; support is on an area basis.
- General support supply to the division, separate brigades, or ACR; depending on task organization, this may include GS-level ammunition, petroleum, and general supplies.
- Area support to units in the CSG's area of responsibility behind the division's rear boundary.
- Reinforces DS maintenance and field service support to divisions, separate brigades, and ACRs.
- Is allocated one per division; METT-T determines CSB organization.

Corps Support Group (CSG) (Rear). The rear CSG consists of multifunctional CSBs, which provide area support in the corps rear, and functional battalions, which provide corps support forces and reinforcing support to forward CSGs (Figure A-13). They also provide—

- Logistic support (less personnel, finance, and CHS) on an area basis to units employed in or passing through its AO, including divisions, sepa-



NOTES:

1. Number of battalions dependent on force structure, geography, and span of control.
2. Direct support units only.
3. Units are assigned based on supported units.

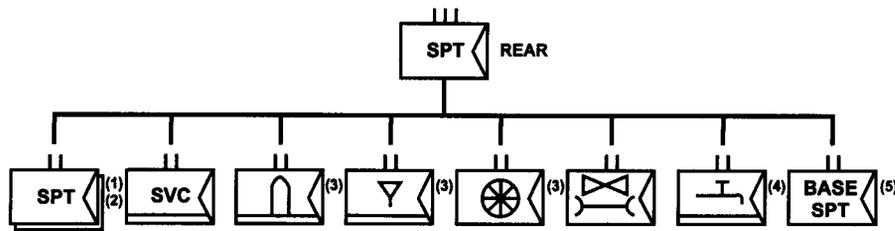
Figure A-12. Corps support group (forward) organization

rate brigades, and ACRs held in reserve; the rear CSG also supports hospitals and replacement units that normally operate in the rear of the combat zone.

- Reinforcing support to the forward CSGs; the rear CSG's subordinate units maintain the bulk of the corps' GSS base from which to resupply forward CSG GS and DS units.
- Corps support of petroleum, ammunition, transportation, aviation intermediate maintenance (AVIM), airdrop, and mortuary affairs as well—
 - General support supply units assigned to the rear CSG that provide supplies to DS units.
 - Trucks that may throughput bulk Class III, Class IV, and Class V supplies from the corps' rear area to the division support area (DSA).
 - May also push water forward to support chemical unit requirements in the division AO.

Medical Brigade. The medical brigade commands and controls all corps medical units not organic to divisions, separate maneuver brigades, and cavalry regiments (Figure A-14). It also—

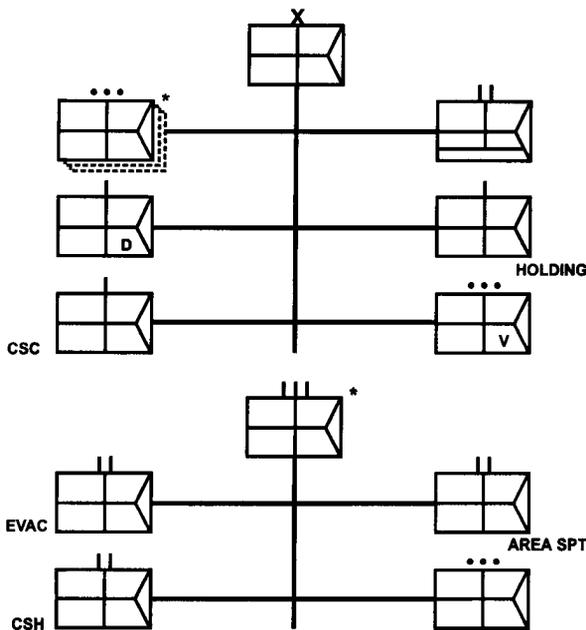
- Controls and provides staff supervision for medical groups; a medical logistic battalion; and



NOTES:

1. Number of battalions dependent on force structure, geography, and span of control.
2. Direct support units only.
3. May be HN support.
4. Attached to support corps requirements in an arid environment.
5. Theater dependent.

Figure A-13. Corps support group (rear) organization



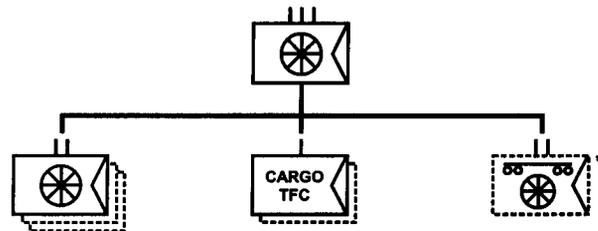
Variable Number

* May include assigned or attached surgical, preventive medicine, and professional detachments.

Figure A-14. Corps medical brigade organization

dental, combat stress control (CSC), preventive medicine, and veterinary units.

- Provides task organizations to meet medical workload demands.
- Advises the senior commander on medical aspects of combat operations and OOTW.



Variable Number

* Normally assigned to TA, TRANSCOM

Figure A-15. Corps transportation group organization

- Provides for medical regulation of patient movement between medical treatment facilities within the corps and coordination for patient movement out of the corps.
- Provides consultative services and technical advice in preventive medicine (environmental health, medical entomology, radiological health, sanitary engineering), nursing, dental, veterinary medicine, and psychiatry.
- Provides control and supervision of Class VIII supply and resupply movement.

Transportation Group. The transportation group provides transportation support to personnel, mail, cargo, packaged POL, ammunition, and heavy or outsized cargo or vehicles (Figure A-15). Its—

- Transportation railway battalions may be assigned to the corps.

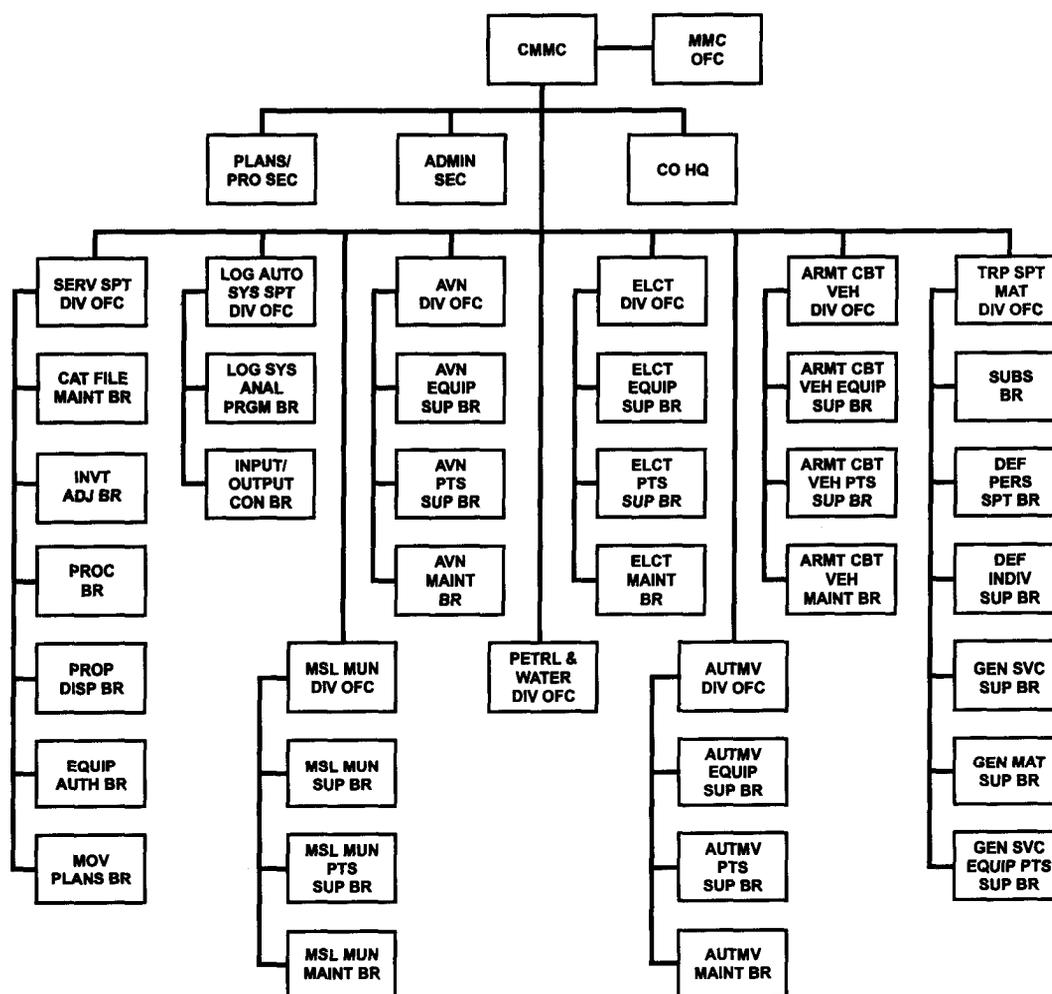


Figure A-16. Corps materiel management center organization

- Transportation battalions provide corps-wide support.
- Transportation cargo transfer companies support mode-change.

Corps Materiel Management Center (CMMC). The CMMC—

- Provides centralized control of all GSS within the corps.
- Maintains asset visibility of selected DS level stocks in Class II, packaged Class III, IV, VII, and IX supplies.
- Manages DS maintenance support operations.

NOTE: See Figure A-16.

Corps Movement Control Center (CMCC). The CMCC—

- Provides centralized movement control and highway regulation.
- Monitors transportation usage.
- Forecasts transportation needs.
- Coordinates transportation support activities with the CMMC.

NOTE: See also Figure A-17.

Personnel Support. Personnel support is a major element of CSS. Personnel services encompass the tactical functions of manning and the personnel service support portion of sustaining soldiers and

their systems. The six personnel support functions include the following:

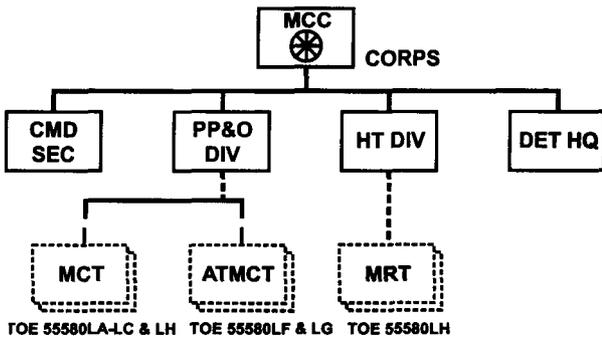
- The finance group (FG)—
 - Provides C² of all finance battalions (FBs).
 - Commander serves as the corps' finance staff officer.
 - Provides finance support to all Army commands and to soldiers located within the corps' boundary; supports joint and combined commands as directed, including—
 - Military pay.
 - Commercial vendor services.
 - Disbursing and funding.
 - Accounting.
 - Foreign national pay.

- Civilian pay.
- EPW pay.
- Contracting support.

NOTE: See also Figure A-18.

- The personnel group—
 - Provides C² for PSB, a replacement company, and a band.
 - Provides personnel service support to corps, divisions, and other units on an area support basis.
 - Maintains strength of all area units.
 - Monitors and reports casualties.
 - Recommends priority for replacements and projects future personnel requirements.
 - Provides replacements to area units.
 - Provides postal support.
 - Includes the band.

NOTE: See also Figure A-19.



--- Attached
 [Dashed Box] Variable Number

Figure A-17. Corps movement control center organization

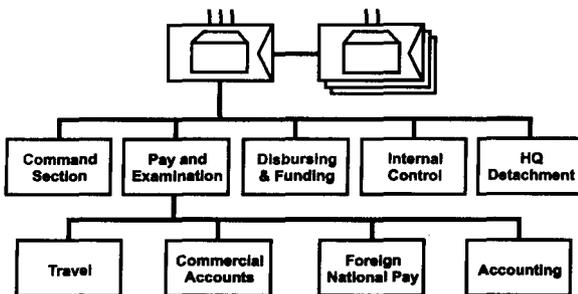
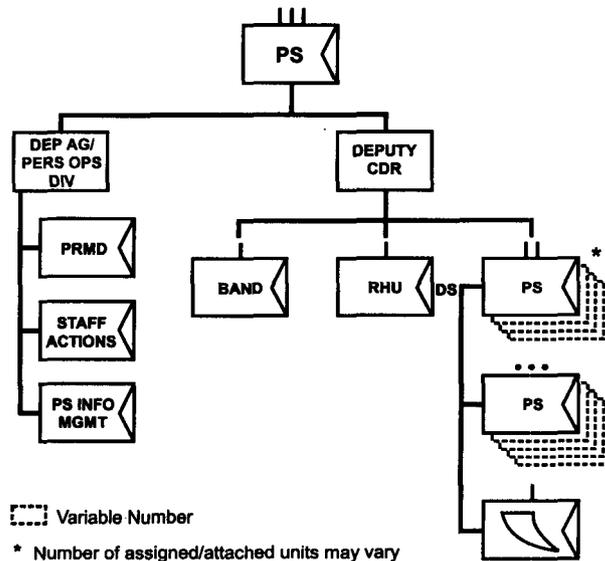


Figure A-18. Finance group organization



[Dashed Box] Variable Number
 * Number of assigned/attached units may vary

Figure A-19. Personnel group organization

- The public affairs office—
 - Advises and informs the commander regarding PA guidance.
 - Makes staff estimates and assesses PA impact of command actions.
 - Satisfies soldiers' needs for military and domestic information.
 - Coordinates media representatives' logistic needs.
 - Gathers and releases newsworthy information.
 - Explains command operations to the media in easily understandable terms.
 - Provides PA units (press camp headquarters and mobile PA detachments) to assist the corps PAO, and other units without a dedicated PAO, in the performance of command and public information services.
 - Responds to media queries.
 - Distributes command information.
 - Trains "working with the media" to commanders and their subordinates.
 - Acts as a focal point for the commander to interface with media.
 - Uses resources to communicate internally and externally.
 - Helps enhance morale.

Corps Engineer

The *Corps Engineer Brigade*—

- Commands and controls all corps engineer units that are not organic to divisions, separate maneuver brigades, and cavalry regiments.
- Reinforces engineers organic to divisions, separate brigades, and cavalry regiments.
- Controls and staff-supervises theater engineer forces operating in the corps area.
- Provides mobility, survivability, and sustainment engineering support to the corps based on METT-T.

- Tasks and prioritizes the work of a topographic engineer company from the theater topographic battalion placed in direct support to the corps.
- Provides staffing for a corps staff engineer section that supports each corps CP.
- During force-projection operations, could function as the theater engineer and regional contingency engineering manager (RCEM), with augmentation required in the areas of real estate acquisition, construction management, and construction contracting support.

NOTE: See also Figure A-20.

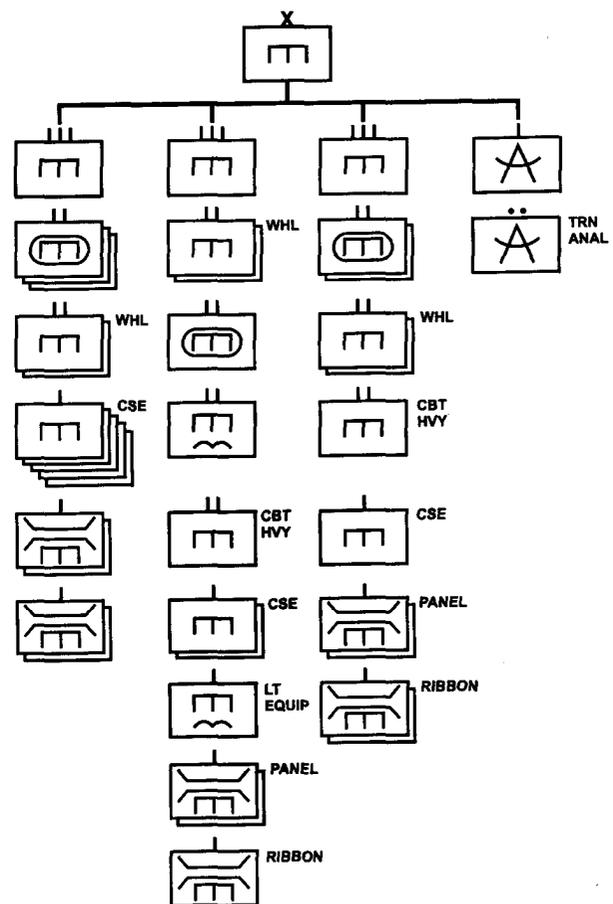


Figure A-20. Corps engineer brigade organization

The Engineer Group (Combat)—

- Commands and controls from five to seven subordinate corps engineer units on either an area or functional basis, either far forward in the division and brigade areas or in the corps rear area.
- May become the crossing force engineer headquarters for large-scale mobility operations, including river crossings and complex obstacle breaching.
- May control GS general engineering in corps and division rear areas, focusing on construction of MSR and logistic support bases.
- May be task-organized to support a division when the division's reinforced corps engineer strength exceeds the C² capability of the division engineer and his staff.

The Engineer Battalion (Corps) (Mechanized)—

- Conducts engineer operations in close combat and will fight as mechanized infantry when required.
- Is used to weight the offensive main effort and can be organized to reinforce armored or mechanized divisions, separate armored or mechanized brigades, and ACR engineers by—
 - Supporting corps RISTA forces, including breaching natural and man-made obstacles and improving trafficability of routes for ACRs, self-propelled field artillery, and logistic units.
 - Constituting the breach force for deliberate armored or mechanized brigade, division or corps-level breaches, preserving organic maneuver engineers for follow-on operations.
 - Following and widening breaches conducted by organic maneuver engineer units or breaching bypassed obstacles.
- In the deliberate defense, can be task-organized to reinforce organic maneuver engineers by—
 - Providing countermobility and survivability support.
 - Emplacing ground-emplaced scatterable minefield and conventional obstacles, such as road craters and bridge demolitions.
 - Constructing vehicle fighting positions.

- Requires augmentation from engineer combat support equipment (CSE) companies for sustainment engineering and extensive survivability missions.

The Engineer Battalion (Corps) (Wheeled)—

- Provides engineer support to corps close and rear operations and can fight as mounted or dismounted infantry when required.
- Executes mobility operations forward of the brigade support areas (BSA) to maintain supply routes used by logistic units, tactical routes, and combat trails.
- Can be task-organized to divisions and separate brigades during the deliberate defense.
- Provides countermobility support to corps close operations to prepare the battlefield for decisive operations, including emplacement of the corps' obstacle plan.
- Provides general engineering support to—
 - Keep LOCs open by building, maintaining, and repairing roads, combat trails, forward airfields, and logistic facilities.
 - Construct logistic bases and conduct technical-skill-intensive sustainment engineering operations with task-organized CSE companies and theater engineer units.

The Engineer Battalion (Corps) (Light) and Engineer Battalion (Corps) (Airborne)—

- Are strategically mobile to accompany rapidly deploying force-projection forces and are designed to support corps close operations and fight as light infantry when required.
- Reinforce engineers in light airborne, and AASLT divisions; separate light brigades; light cavalry regiments; and special operations forces.
- Contain down-sized engineer equipment capable of being rapidly deployed anywhere in the world.
- Build, maintain, and repair lodgement airfields, logistic bases, and LOCs.
- Construct individual and vehicle survivability positions for initial arriving forces.
- Widen and improve breaches that light division engineer forces create.

- Are normally task-organized with attached engineer light equipment companies.

The Engineer Battalion (Combat (Heavy))—

- Executes a wide variety of horizontal and vertical construction missions, often simultaneously.
- Is rapidly deployable by ship, relatively self-sustaining, and able to operate independently in remote areas.
- Constructs and provides rapid repair of facilities such as airfields, roads, bridges, theater of operations structures, and prefabricated structures.
- Manages and assists in the construction of ports, pipelines, wells, power plants, and power distribution networks with augmentation from theater engineer forces.
- Can be task-organized to the corps or division to reinforce their general engineering effort and augment their earthmoving capability.

The Engineer Company (Light Equipment) and Engineer Company (Light Equipment (Airborne))—

- Support light, air assault, and airborne engineer forces with down-sized, rapidly deployable engineer equipment.
- Are normally attached to corps or division light, air assault, or airborne battalions but can be task-organized to support corps wheeled or mechanized battalions.
- Perform survivability and sustainment engineering missions in support of early deploying force-projection forces to establish forward logistics bases until heavier corps and theater engineer forces arrive.

The Engineer Company (Combat Support Equipment)—

- Is a rapidly deployable, equipment-intensive company that possesses significant earth-moving capability.
- Is normally attached to corps mechanized or wheeled battalions to augment the battalion's earth-moving capability.
- Can operate independently under the combat engineer group.

- Performs survivability and tank-ditching during deliberate defensive operations in forward brigade areas; general engineering along MSR and combat trails in other corps close operations areas; and sustainment engineering, survivability, and tank-ditching operations in corps rear areas.

The Engineer Company (Topographic) (DS)—

- Builds and maintains the corps topographic digitized terrain data base using the Army tactical command and control system (ATCCS) and various topographic support systems (TSS).
- Provides digitized terrain information to produce products that are available to all command levels from corps to brigade.
- Employs cartographic and reproduction assets that provide corps units with critical terrain data and products (LOS, air and ground masking, air and ground mobility corridors, image maps, intelligence or operations overlays/overprints, modified combined obstacle overlays (MCOO) and so on).
- Interfaces with the G2 ACE at corps and division to enhance the IPB process and aid in the visualization of the battlefield for all corps operations.
- Provides a terrain analysis team to the ACE to conduct ongoing analysis of the effects of terrain and weather on combat operations as an integral part of the continuous IPB process.
- Provides a second terrain analysis team in GS to other corps headquarters.
- Provides to the corps precise TSS that verifies geodetic data that military intelligence and fire support systems use.

The Engineer Company (Ribbon Bridge)—

- Employs a dependable, versatile ribbon floating bridge system that can be rapidly emplaced in a combat environment.
- Is normally task-organized with a corps engineer battalion (mechanized or wheeled) or under a combat engineer group as part of river-crossing operations.
- Ensures that ribbon bridge components can be transported by specialized bridge trucks or sling-loaded by helicopters to the bridge site.

- Provides additional logistic haul capability for the corps when ribbon bridge components are down-loaded.

The *Engineer Company (Panel Bridge)* and *Engineer Company (Medium Girder Bridge (MGB))*—

- Rapidly emplaces tactical standard fixed bridging, either panel bridges (normally Bailey bridges) or MGB over wet or dry gaps in a close combat environment.
- Emplaces fixed bridging to replace float bridging or to bridge gaps that exceed the AVLB's capabilities.
- Is normally task-organized with a corps engineer battalion (mechanized or wheeled) or under a combat engineer group to support gap-crossing operations.
- Provides additional logistic haul capability for the corps when fixed-bridge components are down-loaded.

The *Medium Girder Bridge (MGB) Company*—

- Provides four 30.5-meter (100-foot) Class-60 bridges or two 48.6-meter (160-foot) Class-60 bridges.
- Has sufficient personnel and equipment to simultaneously assemble two bridges.
- Can provide 32 five-ton dump trucks for other missions when bridging is immobilized.

The *Panel Bridge Company*—

- Provides two 24.4-meter (80-foot) Class-50 Bailey bridges or one 58.5-meter (192-foot) Class-60 Bailey bridge.
- Normally receives augmentation from an engineer combat battalion to construct bridges.
- When the bridge is off-loaded, 28 five-ton dump trucks are available for other missions.

Corps Field Artillery

Corps Field Artillery Considerations include—

- Providing FA assets for close support (DS and R) of subordinate elements and keeping enough assets under corps control (GS-R and GS) to influence the close and deep operations at critical times and places.

- Providing adequate FA support for committed combat units; FA support—

- Is most responsive to maneuver units when in direct support.

- Provides minimum support for committed units (one FA battalion in direct support of each committed brigade).

- Includes no more than one FA unit in direct support of a maneuver unit.

- Is achieved by additional FA units assigned the mission of reinforcing or GS-R to a DS unit.

- Giving weight to the main attack in the offense or to the main effort in the defense, including—

- Reinforcing or GS-R missions that can be assigned to provide additional responsive fires to maneuver forces.

- Being positioned and assigned a zone of fire to concentrate fires.

- Allocating ammunition to provide for more support in critical areas.

- Facilitating future operations, including—

- Ensuring success in the face of unforeseen events and smoothly transitioning from one phase of an operation to another.

- Assigning tactical missions and positioning FA and/or ammunition allocations.

- Assigning on-order missions that allow field artillery to anticipate future needs.

- Current tactical missions, positioning, and allocations that planners can modify to anticipate future requirements.

- Providing immediately available FA support for the corps commander to influence the action, including—

- Assigning GS or GS-R missions to FA units making them responsive to the commander.

- Ensuring GS or GS-R units have adequate positions and ammunition to support the corps commander.

- Providing maximum feasible centralized control, including—
 - A high degree of centralized control in defensive situations to ensure the commander can influence the situation when the enemy has the initiative and his actions are difficult to predict.
 - A lesser degree of centralized control in an offensive situation when the supported force has the initiative that will allow FA commanders wider latitude.

NOTE: See also Figures A-21 and A-22.

Corps Military Intelligence

The *MI Battalion (Headquarters, Headquarters and Operations)*—

- Provides C² for brigade headquarters and other units under brigade control.
- Provides the analysis and control company to the G2 for multidiscipline intelligence and CI analysis; intelligence-collection management and synchronization; support to targeting and target development; and IEW technical control.
- Provides logistic and administrative support to subordinate MI units.
- Provides intelligence special purpose communications, automation, and broadcast intelligence terminals to support corps IEW operations.

The *MI Battalion (Tactical Exploitation (TE))*—

- Plans, executes, and sustains CI, interrogation, and LRS operations.
- Provides 16 CI teams in GS of the corps and, when required, DS of subordinate divisions, brigades, and regiments.
- Provides 121 interrogation teams in GS of the corps and, when required, DS of subordinate divisions, brigades, and regiments.
- Provides 18 LRS teams in GS of the corps.

The *MI Battalion (Aerial Exploitation(AE))*—

- Plans and coordinates aerial reconnaissance and surveillance operations.
- Provides 12 RC-12 special electronic mission aircraft, one integrated processing facility, and associated support systems in GS of the corps.

- Provides 16 UAVs, 4 ground control stations, and 2 launch or recovery sections in GS of the corps and, when required, DS of subordinate divisions, brigades, and regiments.
- Intercepts and locates communications and non-communications emitters using receiver and DF equipment mounted in special electronic mission aircraft and controlled electronically from a ground-based integrated processing facility.
- Provides near-real time signal intelligence analysis and reporting of information collected by operators controlling receivers and DF equipment on board special electronic mission aircraft.
- Conducts day and night imagery collection using electro-optical and infrared cameras mounted in UAVs.
- Provides near-real time imagery analysis and reporting of imagery collected by UAVs.

The *MI Battalion (Tactical Exploitation (TE)) Reserve Component (RC)*—

- Augments the CI and interrogation capability of the MI brigade.
- Provides a document exploitation section.

NOTE: See also Figures A-23 and A-24.

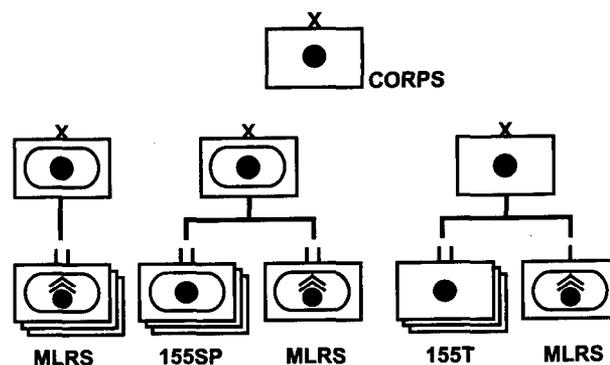


Figure A-21. Corps field artillery organization

Caliber	105-MM	105-MM	105-MM	105-MM	MLRS
Model	M102	M119	M109A2 M109A3 M109A6 (Palidin)	M198	M270
Maximum Range	11,500	14,000	18,100 24,000	18,100	30,00 100 (+) km (ATACMS)
Ammunition	HE Illumination HEP-T APICM APERS WP RAP	HE Illumination HEP-T APICM APERS WP RAP	HE DPICM APICM Smoke RAP FASCAM Copperhead WP Illumination	HE DPICM APICM Smoke RAP FASCAM Copperhead WP Illumination	DPICM
Maximum Rate of Fire/Minute; Number of Minutes	10.3	6.2	4.3 1.0 (A6)	4.3 then 20	12 rds 2 (ATACMS)
Sustained Rate of Fire; Number of Minutes	3	3,30 then 1	1,60 then .5	1 (for charge 8, 1 rd/minute; then 1 rd/3 minutes thereafter.	
Range of RAP (m)	15,100	15,100	23,500 (A2/A30) 30,000 (A6)	30,000	
Fuzes	PD, VT, MT, MTSQ, CP, DELAY	PD, VT, MT, MTSQ, CP, DELAY	PD, VT, MT, MTSQ, DELAY	PD, VT, MTSQ, CP, DELAY	Electronic Time

Figure A-22. Field artillery resources

Corps Military Police

The *Headquarters, MP Brigade*—

- Provides C² for from 3 to 6 MP battalions.
- Provides liaison at the corps MCC and the corps rear CP and locates the long-range planning section near the corps main CP.
- Commander also functions as corps provost marshal (PM).
- Coordinates with HN military and civilian police authorities.
- Normally assigns one brigade to the corps.
- Is GS to the corps and receives guidance and/or taskings from the corps CP.
- Is a highly mobile force with sufficient combat power to defeat Level II threats to rear areas;

when designated a TCP and augmented according to METT-T—

- Assignment of static security missions should be minimized.

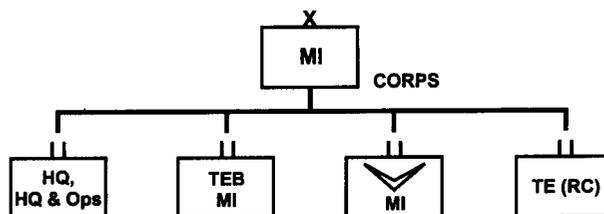


Figure A-23. Corps MI brigade organization

COLLECTION	RANGE	DOWNLINK TO USERS
Organic ground resources: – Interrogators	25 km	None. Voice radio or teletype to corps G2. Two hours to G2 ACE. May be attached or DS to maneuver unit CEWI.
– LRSU	150 km	None. Data burst communications to base station retransmissions to communications control set at the ACE.
Organic aerial resources: – Communications and nonintercept (GRCS)	150 km	NRT to corps. Downlinked into G2 ACE by ground terminal.
– Imagery (UAV-SR)	125 km	NRT to corps and division via RVT.
Special forces	150 km	LNO to corps. Voice radio to SFOB. Up to 24 hours to corps G2 ACE.
Air reconnaissance	All corps areas	Some real time to USAF ground stations. From two to four hours to corps ASOC. Some real-time downlink to compatible Army ground stations at corps ACE.
Theater systems – Imagery (J-STARS)	200+ km	NRT via GSM to corps and division.
National systems	150 km	Classified. Platform dependent.

NOTE: Generally flown from 30 to 45 kilometers behind the FEBA.

Figure A–24. Corps IEW resources

- Access to intelligence and fire support should be maximized.
 - Is inadequately resourced to simultaneously perform BCC, area security, EPW, and law-and-order operations or when—
 - The rear CP establishes priorities for MP support.
 - Priorities must support the rear operations commander's intent and concept.
 - Normally attaches one MP company to each maneuver division.
 - May attach additional MPs to support divisions and units conducting river-crossing operations.
- The *Headquarters, MP Battalion*, provides C² for from 3 to 6 MP companies. Each MP company, combat support—
- Provides BCC for—
 - Route reconnaissance and surveillance.
 - Main supply route regulation enforcement.
 - Straggler control.
 - Refugee control.
 - Intelligence collection and reporting.
 - Information dissemination.
 - Provides area security for—
 - Area reconnaissance and surveillance.
 - Security of designated critical assets (for example, corps main CP).
 - Area damage control.
 - Terrorism counteraction.
 - Nuclear, biological, and chemical detection and reporting.
 - Response force operations.
 - Counterincursion operations.
 - Air base ground defense (when tasked).

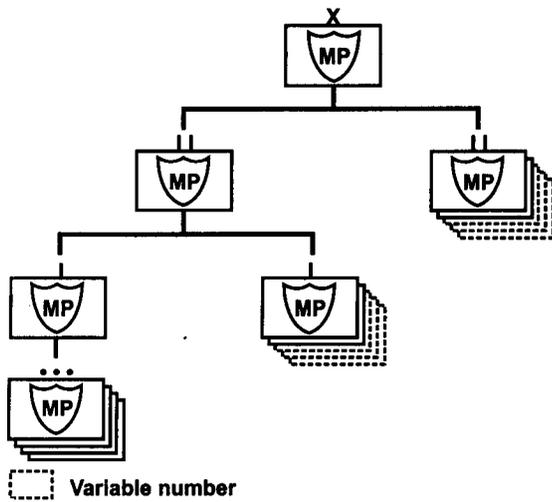


Figure A-25. Corps MP brigade organization

- Provides EPW and civilian internee collection and evacuation.
- Conducts law-and-order operations.

NOTE: See also Figure A-25.

Corps Signal Brigade (Mobile Subscriber Equipment)

The Headquarters, Signal Brigade--

- Provides C² for from one to three area signal battalions and one support battalion.
- Provides a corps signal officer to support operational and planning requirements of corps headquarters.
- Provides assistance to MSCs.
- Provides a corps COMSEC officer.
- Provides systems engineering and network control branches for area, combat net radio (CNR), and data distribution systems.
- Provides communications and electronic maintenance for organic equipment.
- Provides a tactical satellite company to extend the range of the area common user (ACU) system (ACUS).

The Area Signal Battalion--

- Provides three area signal companies; each capable of—
 - Installing, operating, and maintaining two node switching sites (NSS) and their associated extension switching facilities to provide mobile and stationary subscribers access to the ACU network.
 - Employing LOS radios to interconnect the NSS forming a grid interconnecting these major node centers and giving the ACUS the survivability and multiple access required by corps users, and which then connect to extension switches, via LOS radio, to provide access to the area wire subscribers and to the radio access units supporting the mobile users.

- Provides one support signal company that—
 - Provides large and small capacity switchboards (extension switches), which can support up to 176 wire subscribers, will normally be used to support the COSCOM or rear CP.
 - Provides radio access for mobile users.
 - Provides a data distribution section and a single-channel objective tactical terminal section when equipment is available.

The Support Signal Battalion--

- Provides support throughout the corps area, with possible missions of augmenting the corps' divisions and supporting corps deep operations.
- Consists of two area signal companies and one support company identical in equipment and personnel to the area signal battalion.

Signal Considerations include, when fully deployed, the corps area network that provides coverage for an area of approximately 37,000 square kilometers. Other signal considerations include the following:

- The corps area network can interface with joint or combined forces and HN communications.
- The mobile telephone can provide some commanders and other selected users continuous access to the area communications system during movement and CP displacement.

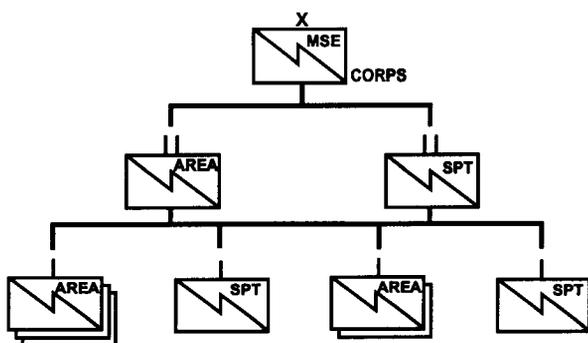


Figure A-26. Corps signal brigade organization

- Large and small extension switches can be remoted up to five miles from their supporting LOS radios, greatly reducing the electronic signature.
- Some extension switches can interface with the CNR, thus allowing single-channel ground and airborne radio system (SINCGARS) users access to the ACUS.
- Selected extension switches have a NATO analog interface to allow interoperability with allied area communications systems.
- The POSNAV system can provide high-volume data distribution in addition to its location capability (including manpack, surface, and airborne terminal configurations).
- The signal brigade can support corps deep operations through the use of LOS relays to extend the area communications system and improved high-frequency single-channel radio transmissions.
- Communications equipment is designed to operate during all weather conditions.
- With skilled crews, emplacement times for major NSS should not exceed 30 minutes.
- Communications sites that require logistic support from either their parent unit or the supported unit; this requirement must be included during planning and adjusted in response to the tactical situation.
- Communications equipment is designed to operate effectively in an ECM and/or EMP environment.

NOTE: See also Figure A-26.

Special Forces (SF)

Special Forces Detachments, Special Forces Battalion Headquarters (Special Forces Operational Detachment-C (SFOD-C)); and Special Forces Company Headquarters (Special Forces Operational Detachment-B (SFOD-B))—

- Plan, direct, and support special reconnaissance, direct action, FID, and UW missions.
- Normally establishes and operates a forward operating base (FOB) to control detachments in theater.
- May serve as a SOCCE located with a conventional force headquarters.

Special Forces Operational Detachment-A (SFOD-A)—

- Plans and conducts special reconnaissance, direct action, FID, or UW missions independently or as part of a larger force.
- Infiltrates and exfiltrates by air, sea, and land.
- Operates in remote areas and hostile environments for extended periods with minimal external direction and support.

Rangers

The rangers plan and conduct special operations and special light infantry operations. The focus is normally deep penetration raids or interdiction operations against targets of strategic or operational significance. These targets generally require tactics that limit collateral damage or allow an intact seizure of a facility for subsequent use by immediately converging force, such as—

- Command, control, communications, and intelligence centers at front and army level.
- Nuclear, biological, and chemical weapons storage sites and delivery means.
- Key logistic centers.
- Air defense and air traffic control integrating centers and air defense weapons sites.
- Radio and television stations, microwave terminals, satellite receiving stations, and telephone lines or exchanges.

- Key power generation and distribution facilities, lines transformers, and grid monitoring centers.
- Airfield and critical transportation nodes.
- Key choice points (such as bridges, tunnels, locks, dams, and mountain passes or routes in restrictive terrain) on vital locations.
- Rescue and evacuation missions.
- Tactical reconnaissance.

Civil Affairs (CA)

The CA Brigade—

- Commands and controls from three to five battalions not attached to subordinate corps units.
- Plans and conducts CA in support of corps operations.

The CA Battalion—

- Plans and conducts CA in support of a DISCOM or COSCOM.
- Provides CA teams to serve as CA staff elements for the major subordinate elements of a division or the area support groups of a COSCOM.

Civil Affairs Planning Considerations include the following:

- Civil affairs must be fully integrated into corps operations to minimize civil interference and maximize HN support.
- When the corps is operating in a friendly nation having an effective government, CA support will primarily consist of coordination and liaison; when operating in enemy territory or in a friendly nation with a weak or ineffective government, CA units may have to establish a temporary civil administration until existing conditions stabilize.
- The corps commander must comply with international and US national law and, where applicable, with foreign national law.

Psychological Operations (PSYOP)

The Tactical Support Battalion—

- Provides a CPSE for a supported corps.

- Coordinates corps PSYOP support requirements with the POTF/JPOTF.
- Performs detailed PSYOP support planning.
- Conducts PSYOP assessments.
- Provides tactical PSYOP companies to the supported corps' attached divisions.

The Tactical Support Company—

- Provides PSYOP staff support to division and brigade headquarters.
- Disseminates PSYOP products (loudspeaker messages, leaflets, posters, and so on) and conducts face-to-face communications at the tactical level.
- Executes PSYOP actions at the tactical level in support of PSYOP programs.
- Coordinates division and brigade PSYOP support requirements with the POTF/JPOTF.

Psychological Operations Considerations include the following:

- The corps must ensure continuity with strategic and operational PSYOP being conducted at EAC.

Augmentation of the PSYOP battalion by indigenous writers, announcers, illustrators, and interpreters will enhance the operational effectiveness of the unit.

NOTE: See also Figure A-27.

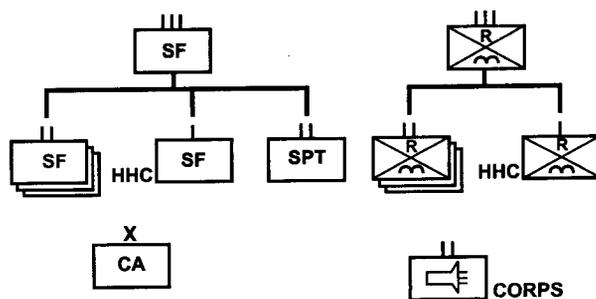


Figure A-27. Special operations forces organization