

**PEER REVIEW  
COORDINATING DRAFT**

**TASK ANALYSIS  
FOR**

**PROVIDE COUNTERMOBILITY  
(CRITICAL COMBAT FUNCTION 23)**

**AS ACCOMPLISHED BY A BATTALION TASK FORCE**

**PRIME CONTRACTOR  
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**Task Analysis for Provide Countermobility  
as Accomplished by a Battalion Task Force.  
Critical Combat Function 23 (CCF 23)**

**Kent Harrison**

**BDM Federal, Inc.**

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**August 1996**


**United States Army Research Institute for the Behavioral and Social Sciences**

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13. ABSTRACT (Maximum 200 words) The purpose of CCF 23 is to delay, channel or stop offensive movement by the enemy in order to destroy his forces directly or indirectly by enhancing the effectiveness of friendly direct and indirect weapons systems. The outcomes include: 1) Obstacles sited to support maneuver concept. 2) Obstacles constructed on time to standard with no bypass available. 3) Responsibility for obstacles with Maneuver Commander. 4) Obstacles secured, with gaps closed, covered by fire. 5) FASCAM ready for employment; its use supports the maneuver plan and the employment criteria are understood by key personnel.			
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PROVIDE COUNTERMOBILITY**

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## PREFACE

This task analysis of **Provide Countermobility, Critical Combat Function 23 (CCF 23)**, is an intermediate product of the process of developing a training strategy for the CCF. The analysis reflects tasks, products, players and processes in sequence necessary to providing countermobility for a heavy battalion task force.

**CRITICAL COMBAT FUNCTIONS:** *The integration of related players and tasks that represent a source of combat power. The synchronization of critical combat functions provides maneuver commanders at any echelon with a definable outcome that materially affects the battle.*

The battle phases **PLAN, PREPARE and EXECUTE** relate to the entire battalion task force (TF) battle vice phasing for this particular CCF.

This analysis depicts the activities of CCF 23 from receipt of the brigade operations order through the completion of the obstacles and on through consolidation and the reorganization after the fight. Since obstacles may be emplaced/constructed solely by engineers, the CCF includes handoff of the obstacles to the TF.

The level of detail and the tasks were selected by the analyst as important to the analysis of the CCF from the perspective of the TF training strategy. Compliance with branch training strategies and proficiency at MTP tasks and subtasks are recognized to be the responsibility of TF subordinate commanders. However, some tasks and subtasks are critical to TF success; these, then, are included in this analysis because the TF commander may wish to emphasize them in his training guidance.

**INDEX OF  
CRITICAL COMBAT FUNCTIONS**  
Grouped By Battlefield Operating System (BOS)

<b>INTELLIGENCE</b>	(1)	Conduct Intelligence Planning
	(2)	Collect Information
	(3)	Process Information
	(4)	Disseminate Intelligence
<b>MANEUVER</b>	(5)	Conduct Tactical Movement
	(6)	Engage Enemy with Direct Fire and Maneuver
<b>AIR DEFENSE</b>	(16)	Take Active Air Defense Measures
	(17)	Take Passive Air Defense Measures
<b>FIRE SUPPORT</b>	(7)	Employ Mortars
	(8)	Employ Field Artillery
	(9)	Employ Close Air Support
	(10)	Conduct Electronic Collection and Jamming
	(11)	Conduct Battlefield PsyOps
	(12)	Employ Chemical Weapons
	(13)	Conduct Counter Target Acquisition Operations
	(14)	Employ Naval Gunfire
(15)	Coordinate, Synchronize and Integrate Fire Support	
<b>MOBILITY AND SURVIVABILITY</b>	(21)	Overcome Obstacles
	(22)	Enhance Movement
	(23)	Provide Countermobility
	(24)	Enhance Physical Protection
	(25)	Provide Operations Security
	(26)	Conduct Deception Operations
	(27)	Provide Decontamination
<b>COMMAND AND CONTROL</b>	(18)	Plan for Combat Operations
	(19)	Direct and Lead Unit During Preparation for the Battle
	(20)	Direct and Lead Units in Execution of Battle
<b>COMBAT SERVICE SUPPORT</b>	(28)	Provide Transport Services
	(29)	Conduct Supply Operations
	(30)	Provide Personnel Services
	(31)	Maintain Weapons Systems and Equipment
	(32)	Provide Health Services
	(33)	Treat and Evacuate Battlefield Casualties
	(34)	Conduct Enemy Prisoners of War (EPW) Operations
	(35)	Conduct Law and Order Operations
	(36)	Conduct Civil Affairs Operations
	(37)	Provide Sustainment Engineering
	(38)	Evacuate Non-combatants from Area of Operations
(39)	Provide Field Services	

## STRUCTURE OF CRITICAL COMBAT FUNCTIONS RELEVANT TO BATTALION TASK FORCE OPERATIONS

**CRITICAL COMBAT FUNCTION:** *The integration of related players and tasks that represent a source of combat power. The synchronization of critical combat functions provides maneuver commanders at any echelon with a definable outcome that materially affects the battle.*

- I. **Intelligence BOS** — The ways and means of acquiring, analyzing and using knowledge of the enemy, weather and terrain required by a commander in planning, preparing and conducting combat operations. These CCF are continuous throughout the planning, preparation and execution phases of the battle.
  1. **CCF (1) Conduct Intelligence Planning** — The development and coordination of information relative to the enemy, weather and terrain prior to and during the development of the unit OPORD; the planning to collect information from battlefield sources and to acquire intelligence from other headquarters. Focus of this CCF is the Intelligence Preparation of the Battlefield (IPB). This CCF addresses:
    - a. Reconnaissance and Surveillance plan.
    - b. Integrated threat templates (doctrinal; event; input to DST).
    - c. Terrain and Weather analysis.
  2. **CCF (2) Collect Information** — Obtaining information in any manner from TF elements and from sources outside the TF (e.g., higher headquarters; adjacent units); this CCF includes the tasks associated with managing the processes and activities necessary to collect battlefield information which may eventually be used to provide intelligence relative to the enemy, terrain and weather. This CCF addresses:
    - a. Information collected as a result of R & S plan.
    - b. Continuous information collection and acquisition from all sources.
  3. **CCF (3) Process Information** — The conversion of information into intelligence through collation, evaluation, analysis, integration and interpretation in a continual process. This CCF addresses:
    - a. Evaluation of threat information.
    - b. Evaluation of physical environment information.
    - c. Integration of intelligence information.
    - d. Development of enemy intentions.
    - e. Development of targeting information.
    - f. Preparation of intelligence reports.
    - g. Update of situational template.
    - h. Provision of battlefield area reports.
  4. **CCF (4) Disseminate Intelligence** — Transmission of information by any means (verbal, written, electronic etc.), from one person or place to another to provide timely dissemination of critical intelligence to all appropriate members of the combined arms team. This CCF addresses:
    - a. The sending of processed intelligence in a timely manner to those on the combined arms team who can by its receipt, take appropriate actions to accomplish the mission. This includes intelligence on the enemy, terrain and weather.



- b. The sending of raw intelligence directly from those responsible for reconnaissance and surveillance to the commander should that raw intelligence be time sensitive (and not be subject to receipt and processing by intelligence analysts).
- c. Dissemination of battlefield reports.

II. **Maneuver BOS** — The employment of direct fire weapons, platforms and systems through movement and fire and maneuver to achieve a position of advantage in respect to enemy ground forces, in order to accomplish the mission. The direct fire weapons are: tank guns; BFV 25mm; anti-tank guns and rockets; attack helicopter guns and rockets; small arms; crew served weapons; directed energy weapons systems.

1. **CCF (5) Conduct Tactical Movement** — Position direct fire weapons systems relative to the enemy to secure or retain positional advantage making full use of terrain and formations. Tactical movement occurs when contact with the enemy is likely or imminent but direct fire engagement has not yet occurred. Units supporting maneuver units are included. This CCF addresses:

- a. Subordinate element OPORD preparation and dissemination.
- b. Preparation for movement.
- c. Movement, mounted and dismounted; on and off road.
- d. Closure of movement — tactical assembly area; tactical positions.
- e. Navigation.
- f. Force protection.
- g. Air movement.

2. **CCF (6) Engage Enemy with Direct Fire and Maneuver** — Entering into ground combat with the enemy using direct fire and/or close combat in order to destroy the enemy or cause him to withdraw. This CCF relates only to those direct fire weapons systems associated with the Maneuver BOS. This CCF is initiated with the OPORD at the completion of the planning phase of the battle and includes all tasks associated with subordinate echelon planning, preparation and execution of the battle. This CCF addresses:

- a. Subordinate element OPORD preparation and dissemination.
- b. Preparation of engagement areas.
- c. Rehearsals of battle plans.
- d. Pre-combat prepare to fire checks.
- e. Target acquisition.
- f. Fire control and distribution.
- g. Fratricide.
- h. Conduct close combat.
- i. Integration of direct fire with maneuver.
- j. Control of terrain.
- k. Prestocked ammunition.
- l. Resupply during operations.
- m. Maintenance during operations.
- n. Consolidation and reorganization.

III. **Fire Support BOS** — The collective, coordinated, and synchronized use of target acquisition data, indirect fire weapons, armed aircraft (less attack helicopters) and other lethal and non-lethal means against ground targets in support of maneuver force operations and to achieve the commanders intent and scheme of maneuver. The Fire Support BOS

addresses these weapons: mortars; field artillery; close air support; electronic measures; naval gunfire.

1. **CCF (7) Employ Mortars** — Employment of mortars by the maneuver unit to place fires on the enemy or terrain to support the commander's concept and intent. This CCF initiates with the receipt of an OPORD by the maneuver commander and address those tasks required during the preparation and execution phases of the battle. This CCF addresses:
  - a. Subordinate element OPORD preparation and dissemination.
  - b. Prepare to fire checks.
    - i. Rehearsals.
  - c. Pre-combat checks.
  - d. Development of order to fire.
  - e. Tactical movement.
  - f. FDC operations.
  - g. Target engagements with illumination, smoke, HE.
  - h. Sustainment operations.
  
2. **CCF (8) Employ Field Artillery** — The ways and means employed by the maneuver unit to cause indirect artillery fires to be placed on the enemy or terrain to support the commander's concept and intent. This CCF initiates upon receipt of an OPORD by the maneuver commander and includes tasks performed during the preparation and execution phases of the battle. The Fire Support Coordination tasks necessary to integrate the field artillery and the maneuver units are the primary focus. This CCF does not address those field artillery tasks associated directly with those actions taken by the batteries of the artillery battalion in the conduct of their support mission such as FDC operations, gun operations, etc. This CCF addresses:
  - a. Fire Support — Maneuver unit rehearsals.
  - b. FSE operations during the preparation and execution phase of the battle.
  - c. FSO and FIST operations in coordination with their maneuver commander.
  - d. Positioning and movement within the maneuver unit sector or zone.
  - e. Indirect fire missions in support of maneuver commander's concept and intent.
  - f. Sustainment operations.
  - g. Indirect fire planning as battlefield METT-T change.
  
3. **CCF (9) Employ Close Air Support** — Planning for, requesting and employing armed aircraft (less attack helicopters) in coordination with other fire support (lethal and non-lethal) against ground targets in support of the maneuver force commander's concept and intent. This CCF addresses:
  - a. Air-ground attack requests.
  - b. Air space coordination and management.
  - c. Air Liaison Officer, Forward Air Controller, other Army Fire Support Coordination Officer, USN/USMC Bde Team Commander, SALT-O and FCT-O tasks that enable air to ground attacks.
  
4. **CCF (10) Conduct Electronic Collection and Jamming** — Actions taken to deny the enemy effective command, control and communications of his own tactical force in support of maneuver commander's concept and intent. This CCS includes jamming, deception, and collection.
  
5. **CCF (11) Conduct Battlefield PsyOps** — Conduct psychological activities as an integral part of combat operations to bring psychological pressure to bear on enemy

forces and civilians under enemy control in the battle area, to assist in the achievement of tactical objectives in support of maneuver commander's concept and intent.

6. **CCF (12) Employ Chemical Weapons** — Employ chemical agents or other means to degrade enemy capabilities in support of maneuver commander's concept and intent.
  7. **CCF (13) Conduct Counter Target Acquisition Operations** — Suppress (e.g. using smoke or dazzling illumination) or degrade enemy direct observation, optics, radar, sensors, electronic DF equipment, and imaging systems in support of maneuver commander's concept and intent.
  8. **CCF (14) Employ Naval Gunfire** — The means and ends to provide naval gunfire in support of the maneuver commander's tactical operation.
  9. **CCF (15) Coordinate, Synchronize and Integrate Fire Support** — Coordination of all fire support means in support of the maneuver commanders concept and intent. This CCF addresses the preparation and execution of tasks necessary to integrate the fire support detailed in the OPOD. The CCF integrates CCF 7-14 in support of maneuver commander's concept and intent.
- IV. **Air Defense BOS** — The means and measures organic or assigned to the maneuver commander which when employed successfully will nullify or reduce the effectiveness of attack by hostile aircraft or missiles after they are airborne.
1. **CCF (16) Take Active Air Defense Measures** — Application of firepower to destroy enemy air targets. This CCF addresses the coordinating tasks which enable the maneuver commander to successfully employ any attached or assigned air defense weapons system as well as the tasks necessary to employ all organic weapons systems against enemy air targets. This CCF addresses:
    - a. Employment of Air Defense Artillery guns and missiles.
    - b. Employment of maneuver unit weapons systems such as small arms, automatic weapons, BFV 25 mm and TOW missiles, tank main gun against enemy air.
    - c. Airspace management.
    - d. Early warning.
    - e. Sustainment.
  2. **CCF (17) Take Passive Air Defense Measures** — The protection of the maneuver force from enemy air by means other than weapons. This CCF will focus on the preparation and execution phases of the battle. This CCF addresses:
    - a. Early warning.
    - b. Dispersion.
    - c. Cover and concealment.
    - d. Air watch.
    - e. Deception.
- V. **Command and Control BOS** — The way and means a maneuver commander exercises authority and direction over organic and assigned combat power in the accomplishment of the mission.

1. **CCF (18) Plan for Combat Operations** — The integration of all members of the combined arms team in the coordinated development of the maneuver unit Operations Order which will guide the activities of the combined arms team in conducting combat operations to accomplish assigned missions. The product/outcome of this CCF is a briefed, understood OPORD. This CCF addresses:
  - a. Receipt and analysis of higher HQ OPORD.
  - b. Issuance of Warning Order.
  - c. Restated mission statement.
  - d. Commander's estimate process/troop leading procedures.
  - e. Commander's guidance.
  - f. Mission analysis (includes course of action development).
  - g. Decision brief to commander.
  - h. Development of a synchronized OPORD.
  - i. Reproduction and distribution of OPORD to all participants.
  - j. Briefing of OPORD; understanding of order by participants.
  - k. FRAGO planning and issue.
  
2. **CCF (19) Direct and Lead Unit during Preparation for the Battle** — The ways and means to prepare combined arms task force for the battle so that the combined arms task force is ready to support the maneuver commander's concept and intent. This CCF addresses:
  - a. Commander's activities.
  - b. Communicating information.
  - c. Briefbacks and backbriefs.
  - d. Rehearsals.
  - e. Management of the means of communicating information.
  - f. Maintaining and updating information and force status.
  - g. Managing information distribution.
  - h. Decisions to act or change ongoing actions.
  - i. Confirming IPB through the reconnaissance effort.
  - j. Determining actions to implement decisions.
  - k. Providing command presence.
  - l. Maintaining unit discipline.
  - m. Synchronizing tactical operations (e.g., execution matrix DST).
  - n. TOC operations (e.g., staff integration and battle tracking).
  - o. Continuity of command.
  - p. Second in command (2IC responsibilities).
  - q. Continuous and sustained operations.
  - r. Communications (e.g., planning, installation and operation of system, management, site selection).
  
3. **CCF (20) Direct and Lead Units In Execution of Battle** — The ways and means to command and control in the combined arms task force execution of the battle plan (engaging the enemy in battle) to accomplish the maneuver commander's concept and intent. This CCF addresses:
  - a. Directing the conduct of the battle.
  - b. Issue orders.
  - c. Command presence.
  - d. Information distribution.
  - e. Decide on need for action or change.
  - f. Maintaining unit discipline.
  - g. Synchronizing tactical operations.

- h. TOC operations (includes CP displacement, security, survivability).
- i. Continuity of command (e.g., C2 redundancy).
- j. Second in command (2IC) responsibilities.
- k. Continuous and sustained operations.
- l. Consolidation and reorganization.

VI. **Mobility and Survivability BOS** — The ways and means of the force that permit freedom of movement, relative to the enemy, while retaining the task force ability to fulfill its primary mission as well as the measures the force takes to remain viable and functional by protection from the effects of enemy weapons systems and natural occurrences.

1. **CCF (21) Overcome Obstacles** — Enabling the maneuver force to maintain its mobility by removing or clearing/reducing natural and man-made obstacles. This CCF will initiate after receipt of the OPORD and address subordinate echelon planning as well as task force preparation and execution tasks necessary to achieve the maneuver commander's concept and intent. This CCF addresses:
  - a. Breach obstacle. Clearing a path or lane for personnel and equipment through a battlefield obstacle.
  - b. Cross gaps. Passing through or over any battlefield terrain feature, wet or dry, that is too wide to be overcome by organic/self bridging.
2. **CCF (22) Enhance movement** — Provision of adequate mobility for the maneuver unit in its area of operations. This CCF addresses:
  - a. Construction and repair of combat roads and trails.
  - b. Construction or repair of forward airfields.
  - c. Facilitating movement on routes. (This includes control of road traffic and control of refugees and stragglers.)
  - d. Tracking status of routes.
  - e. Host nation support.
3. **CCF (23) Provide Countermobility** — Delaying, channeling, or stopping offensive movement by the enemy consistent with the commander's concept and intent by enhancing the effectiveness of friendly direct and indirect weapons systems. This CCF addresses:
  - a. Emplacement of mines and complex obstacles.
  - b. Digging tank ditches.
  - c. Creation of road craters with explosives.
  - d. Terrain enhancement.
4. **CCF (24) Enhance Physical Protection** — Providing protection of friendly forces on the battlefield by enhancing the physical protection of personnel, equipment and weapons systems, and supplies. This CCF addresses:
  - a. Construction of fighting positions.
  - b. Preparation of protective positions.
  - c. Employment of protective equipment.
5. **CCF (25) Provide Operations Security** — Denying information to the enemy about friendly capabilities and intentions by identifying, controlling, and protecting indicators associated with planning and conducting military operations. This CCF addresses:

- a. Analysis to determine key assets and threats to them.
  - b. Cover and concealment.
  - c. Camouflage.
  - d. Noise and light discipline.
  - e. Counter reconnaissance.
  - f. Smoke/obscurants.
  - g. Physical security measures.
  - h. Signal security.
  - i. Electronic security.
6. **CCF (26) Conduct Deception Operations** — Taking actions to mask the real objectives of tactical operations in order to delay effective enemy reaction. This CCF addresses:
- a. Physical deception.
  - b. Electronic deception.
7. **CCF (27) Provide Decontamination** — Making any person, object or area safe by absorbing, destroying, neutralizing, making harmless or removing chemical or biological agents, or by removing radioactive material. This CCF addresses:
- a. Decontamination of individual soldiers and equipment.
  - b. Decontamination of weapon systems and supplies.
  - c. Hasty and deliberate decontamination.
- VII. **Combat Service Support BOS** — The support, assistance and service provided to sustain forces, primarily in the area of logistics, personnel services and health services.
1. **CCF (28) Provide Transport Services** — Providing or coordinating for transportation which will assure sustainment support operations in support of the maneuver commander. Upon receipt of an OPORD, this CCF addresses preparation and execution tasks necessary to achieve transportation support of the maneuver force. This CCF addresses:
- a. Movement of cargo, equipment and personnel by surface or air.
  - b. Loading, transloading and unloading material and supplies.
2. **CCF (29) Conduct Supply Operations** — Providing the items necessary to equip, maintain and operate the force during the preparation and execution phases of the battle. This CCF addresses:
- a. Requesting, receiving, procuring, storing, protecting, relocating and issuing supplies to the specific elements of the force.
  - b. Providing munitions to weapons systems.
  - c. Providing fuel and petroleum products to equipment and weapons systems.
  - d. Reporting status.
3. **CCF (30) Provide Personnel Services** — Management and execution of all personnel-related matters to sustain the force. This CCF addresses:
- a. Personnel Administrative Services.
    - 1) Replacement, casualty reporting.
    - 2) Awards and decorations.

- 3) Postal Operations.
  - 4) Promotions, reductions.
  - b. Financial services.
  - c. Unit Ministry team.
  - d. Legal.
  - e. Public Affairs.
  - f. Reporting personnel status.
  - g. Preservation of the force through safety.
  - h. Management of stress.
4. **CCF (31) Maintain Weapons Systems and Equipment** — Preservation and repair of weapons systems and equipment. This CCF includes the provision of repair parts and end items to all members of the combined arms team before, during and after the battle. Included also is doctrinal echeloning of maintenance (organization, DS, GS). This CCF addresses:
- a. Preventative Maintenance.
  - b. Recovery.
  - c. Diagnosis, substitution, exchange, repair and return of equipment and weapons systems to the combined arms force.
  - d. Reporting status.
5. **CCF (32) Provide Health Services** — Performance, provision or arrangement for health services regardless of location, to promote, improve, conserve or restore the mental or physical well-being of individuals or groups. This CCF addresses
- a. Preventive medicine.
  - b. Field sanitation.
6. **CCF (33) Treat and Evacuate Battlefield Casualties** — Application of medical procedures on battlefield casualties beginning with "buddy aid" through trained medical personnel. The CCF includes movement of casualties from the forward edge of the battlefield back to division-level medical facilities. This CCF addresses:
- a. Triage of battlefield casualties.
  - b. Treatment and movement of casualties to rear (medevac).
    - 1) Identification of levels of care and locations.
    - 2) Synchronization and coordination of movement of medical facilities to ensure continuity of care.
    - 3) Establishment and maintenance of communications with redundant means.
    - 4) Rehearsals.
    - 5) Resupply.
  - c. Evacuation:
    - 1) Ground ambulance.
    - 2) Aero medevac.
    - 3) Non-standard evacuation.
  - d. Handling and processing the remains of soldiers who have died of wounds.
  - e. Reporting status.
7. **CCF (34) Conduct Enemy Prisoners of War (EPW) Operations** — The collection, processing, evacuation and safeguarding of enemy prisoners of war. This CCF addresses:
- a. Collecting and evacuating EPW.
  - b. Searching, segregating, safeguarding, silencing, and rapid rearward movement of EPW.

8. **CCF (35) Conduct Law and Order Operations** — Enforcement of laws and regulations and maintenance of units and personnel discipline.
9. **CCF (36) Conduct Civil Affairs Operations** — Conduct of those phases of the activities of a tactical commander which embrace the relationship between the military forces and civil authorities, and the citizens in a friendly or occupied country or area when U.S. military forces are present.
10. **CCF (37) Provide Sustainment Engineering** — The repair and construction of facilities and lines of communication. This CCF addresses:
  - a. Rear area restoration.
  - b. Construction and maintenance of lines of communication (roads, railroads, ports, airfields).
  - c. Construction support:
    - 1) Marshaling, distribution and storage facilities.
    - 2) Pipelines.
    - 3) Fixed facilities.
    - 4) Drill wells.
    - 5) Dismantlement of fortifications.
11. **CCF (38) Evacuate Non-combatants from Area of Operations** — The use of available military and host-nation resources for the evacuation of US forces, dependents, US government civilian employees, and private citizens (US and other). This CCF addresses:
  - a. Medical support.
  - b. Transportation.
  - c. Security.
  - d. Preparation of temporary shelters.
  - e. Operation of clothing exchange facilities.
  - f. Operation of bathing facilities.
  - g. Graves registration.
  - h. Laundry.
  - i. Feeding.
12. **CCF (39) Provide Field Services** — Performance of service logistics functions by and for Army elements in the field. This CCF addresses:
  - a. Clothing exchange.
  - b. Bathing facilities.
  - c. Graves registration.
  - d. Laundry and clothes renovation.
  - e. Bakeries.
  - f. Feeding (rations supply, kitchens).
  - g. Salvage.

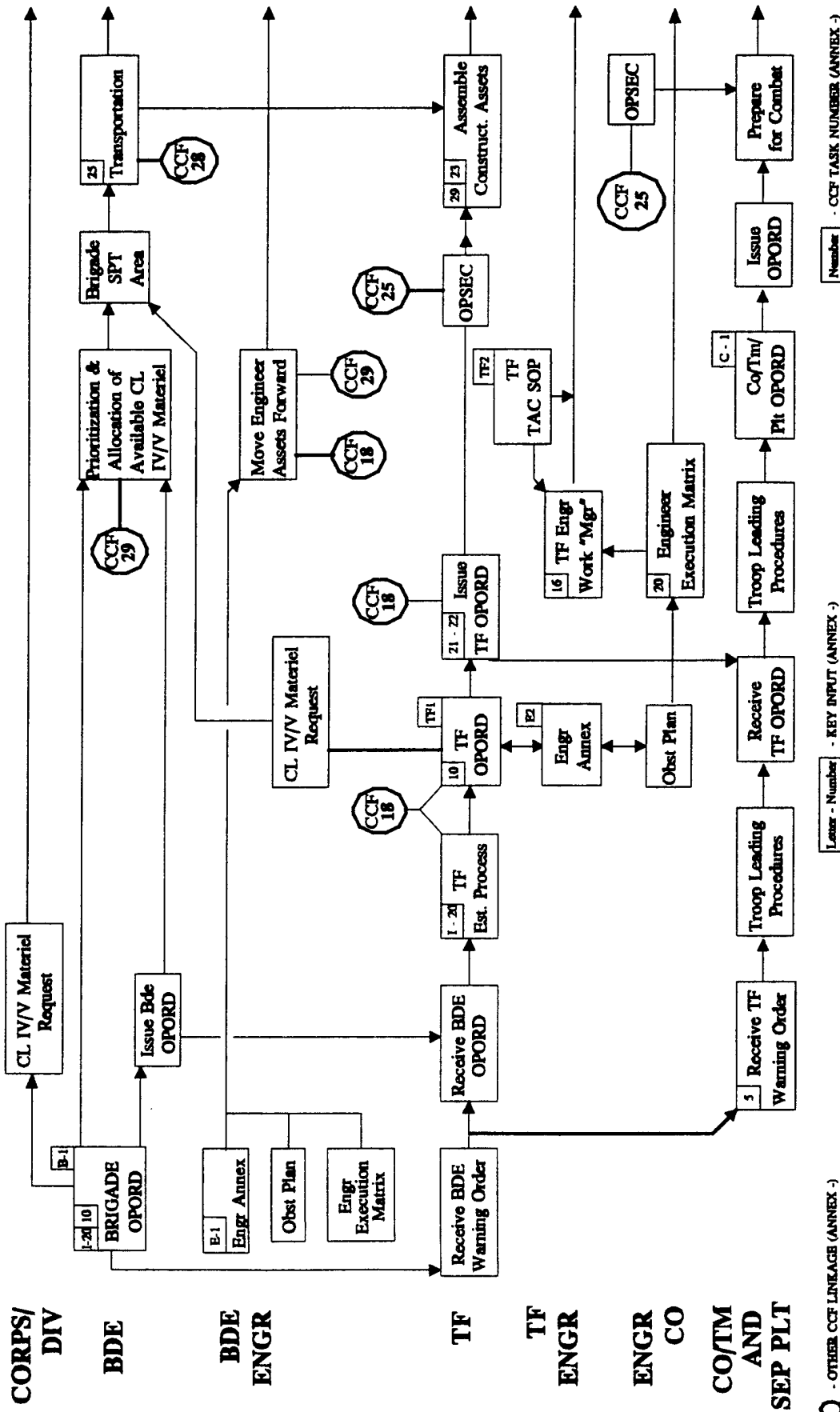


OUTCOMES AND PURPOSE OF CCF 23

<u>OUTCOMES</u>	<u>PURPOSE</u>
1. Obstacles sited to support maneuver concept.	To delay, channel or stop offensive movement by the enemy in order to destroy his forces directly or indirectly by enhancing the effectiveness of friendly direct and indirect weapons system.
2. Obstacles constructed on time to standard with no bypass available.	
3. Responsibility for obstacles with Maneuver Commander.	
4. Obstacles secured, with gaps closed, covered by fire.	
5. FASCAM ready for employment; its use supports the maneuver plan and the employment criteria are understood by key personnel.	

**TASK FLOW BY TASK FORCE BATTLE PHASE PLAN**

CCF 23:



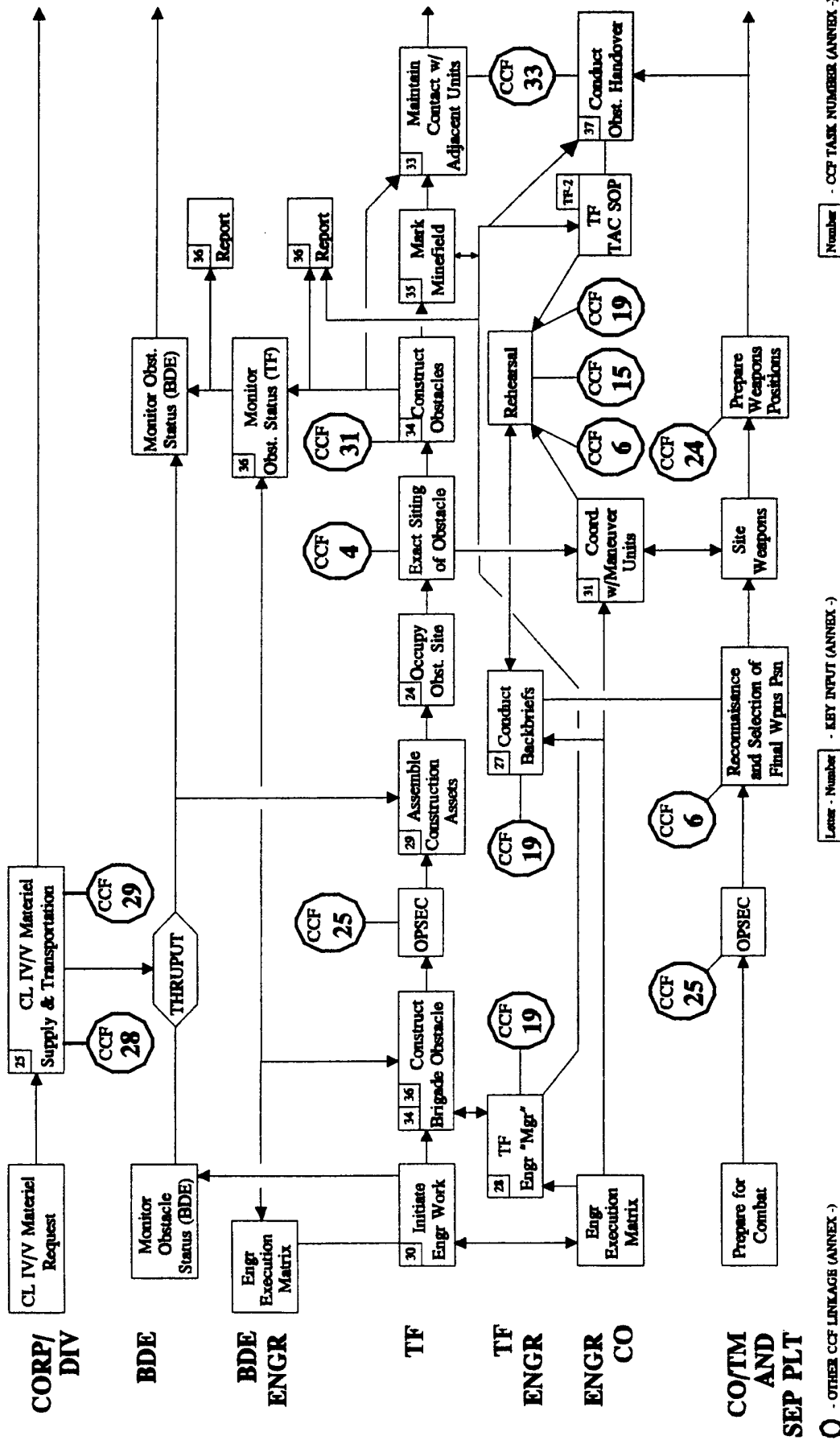
Number - CCF TASK NUMBER (ANNEX -)

Letter - Number - KEY INPUT (ANNEX -)

○ - OTHER CCF LINKAGE (ANNEX -)

**TASK FLOW BY TASK FORCE BATTLE PHASE  
PREPARE**

CCF 23:



Number - CCF TASK NUMBER (ANNEX -)

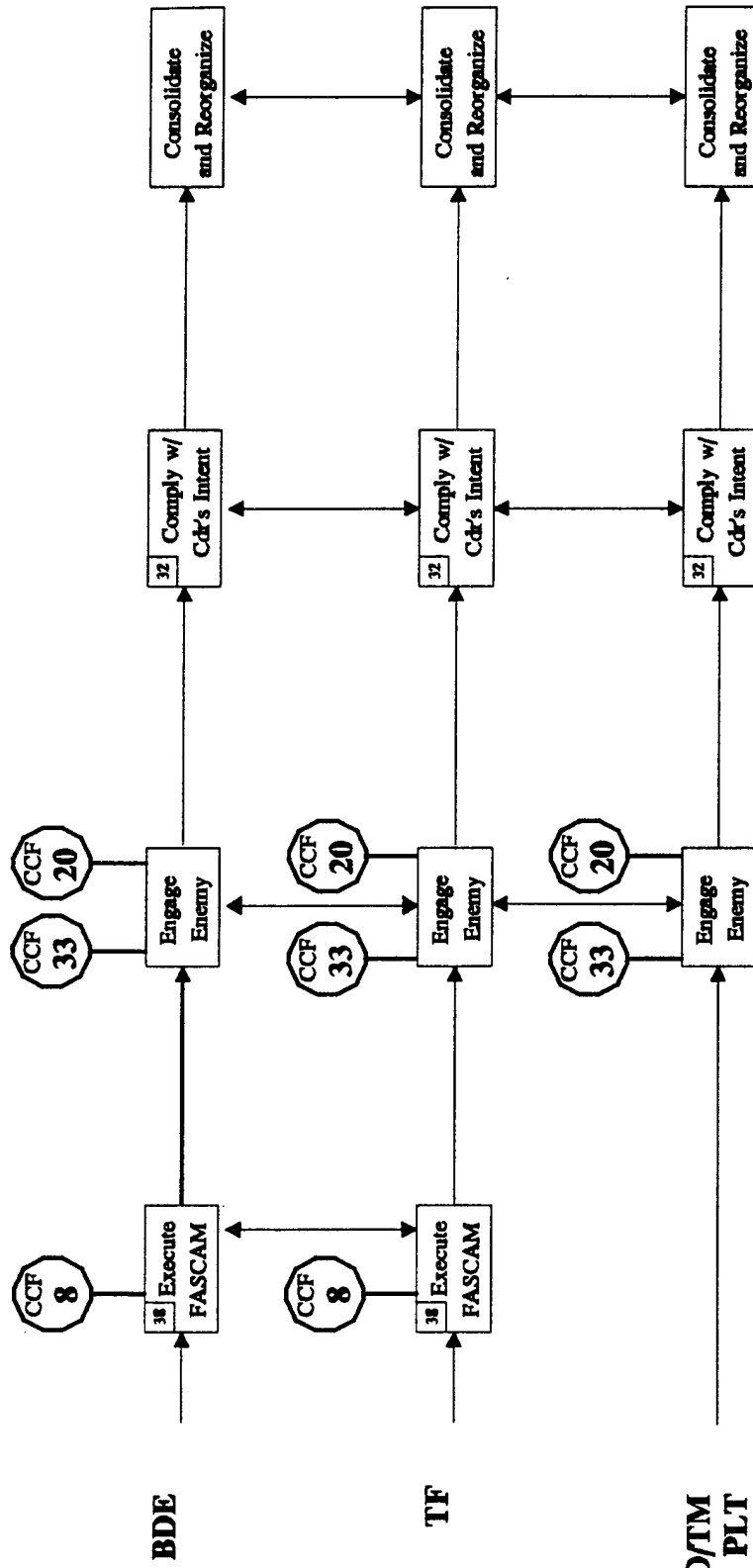
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Q - OTHER CCF LINKAGE (ANNEX -)

**TASK FLOW BY TASK FORCE BATTLE PHASE  
EXECUTE**

CCF 23:

CORPS/  
DIV



Number - CCF TASK NUMBER (ANNEX - )

Letter - Number - KEY INPUT (ANNEX - )

○ - OTHER CCF LINKAGE (ANNEX - )

OTHER CCF WHICH INTERACT WITH CCF 23

<u>CCF #</u>	<u>TITLE</u>	<u>LOGIC</u>
CCF 4	Disseminate Intelligence	Receipt of updated enemy intelligence will allow more precise obstacle siting.
CCF 6	Engage Enemy with Direct Fire and Maneuver	Obstacles must be integrated with positioning of direct fire weapons and maneuver plan.
CCF 8	Employ Field Artillery	Delivery means for FASCAM; Integration with obstacle plan.
CCF 15	Coordinate, Synchronize and Integrate Fire Support	Integrate fires with obstacles.
CCF 18	Plan for Combat Operations	Development of synchronized OPORD and provide countermobility direction.
CCF 19	Direct and Lead Unit During Preparation for the Battle	Command and Control aspects of countermobility.
CCF 20	Direct and Lead Units in Execution of Battle	Command and Control aspects of countermobility.
CCF 24	Enhance Physical Protection	Complementing operations with obstacle emplacement; competing requirements for engineers.
CCF 25	Provide Operations Security	Deny enemy information or deceive enemy about obstacle location and intent; secure obstacle.
CCF 28	Provide Transport Services	Transport supplies, materiel, equipment, personnel.
CCF 29	Conduct Supply Operations	Supply requirements filled and prepared for transport.
CCF 31	Maintain Weapons Systems and Equipment	Impact on available resources, particularly engineer equipment.
CCF 33	Treat and Evacuate Battlefield Casualties	Must plan for and be prepared to treat and evacuate those wounded while providing countermobility targets.

## CCF 23

## KEY PARTICIPANTS BY TASK

<u>TASKS</u>	<u>KEY PARTICIPANTS</u>
1. Understand commander's intent	All combined arms team
2. Conduct mission analysis	TF XO, S3 or representative, S2 or representative, S1/S4 or representative, S3 Air, TF Air Defense Officers, Chem Off/NCO, TF CESO, TF FSO, TF Engineer
3. Understand control measures	All combined arms team
4. Initiate planning process	TF XO, TF Staff and Subordinate CDRs
5. Issue warning order	TF CDR, TF S3 or rep., TF S2 or rep., TF S1/S4
6. Conduct leaders recon	TF CDR, All TF Leaders
7. Conduct terrain analysis	TF S2, S2 Section, TF BICC, TF Engr., TF Air Defense Officer, TF CESO
8. Determine possible obstacle locations and types	TF S2, S2 Section, TF BICC, TF Engr, TF FSO, Scout Plt Ldr
9. Determine obstacle priorities	TF CDR
10. Determine resources	Engr, S4
11. Task organize engineer assets	TF CDR TF XO, TF S3, Engr Co CO, Engr Co and Plts, Co/Tms
12. Plan combat service support	TF XO, TF S1, TF S4, Engr Co CO/Plt Ldr, Co/Tm COs/XOs/1SGs, TF Spt Plt, TF Maint Plt, TF Med Plt
13. Develop a tentative plan	TF CDR and Staff
14. Coordinate with maneuver units	Co/Tm CDRs ENGR, FSO ENGR "Asset Mgr", S3
15. Coordinate FASCAM employment	TF S3, TF FSO, TF Engr
16. Plan for control of supporting resources	TF XO, TF S3, TF Engr, Subordinate Co/Tm CDRs, TF S1/S4
17. Plan for limited visibility operations	All combined arms team
18. Plan for obstacle handover	TF S3, TF Engr, Engr Company CDR/Plt Ldrs, Subordinate Co/Tm CDRs/Plt Ldrs

<u>TASKS</u>	<u>KEY PARTICIPANTS</u>
19. Report intention to lay minefield	Engr Co CDR/Plt Ldrs, Co/Tm CDRs/Plt Ldrs
20. Prioritize the work effort	Engr, S3
21. Issue operations order	TF CDR and Staff Co/Tm CDRs
22. Graphically illustrate the obstacle plan	TF S3 , S3 Section, TF S2, S2 Section, TF Engr, Engr Co CDRs/Plt Ldrs, Co/Tm CDRs/Plt Ldrs
23. Conduct pre-combat checks	TF CDR, Engr Co/Tm CDRs, Attached CDRs FSO, S4
24. Occupy obstacle site	Engr Co CDRs/Plt Ldrs, Co/Tms, Scout Plt Ldr
25. Utilize combat service support assets	Engr, S4, S3
26. Prepare for obstacle handover	Engr Co/Plts, Co/Tms and Plts, Scout Plt Ldr
27. Conduct briefbacks	S3, Co/Tm CDRs Engr, FSO Engr "Asset Mgr"
28. Supervise the implementation of plans and orders	TF S3, TF Engr, Engr Co CO/Plt Ldrs, Co/Tm CDRs/Plt Ldrs
29. Assemble construction assets	S4, Spt Plt Ldr Co/Tm CDRs, Engr, Engr "Asset Mgr"
30. Report obstacle initiation	Engr Co CDRs/Plt Ldrs/Ldrs, Co/Tm CDR/Plt Ldrs/Ldrs
31. Coordinate with maneuver units	TF S3, TF Engr, Engr Co CDRs/Plt Ldrs, Co/Tm CDRS/Plt Ldrs, Scout Plt Ldrs
32. Comply with commander's intent	All combined arms team
33. Maintain contact with adjacent units	TF S3, TF S3 Section, Co/Tm CDRs
34. Construct obstacles	Engr Units, TF Units
35. Mark minefields	Engr Co/Plts, Co/Tms and Plt
36. Report obstacle status	Engr "Asset Mgr" Co/Tm CDRs
37. Conduct obstacle handover	Engr, Co/TM CDRs
38. Execute FASCAM plan	TF CDRs, TF S3, TF FSO, TF Engr, Co/Tm CDRS, Scout Plt Ldr

**KEY INPUTS TO CCF 23  
(W/ CRITICAL INFORMATION)**

**B-1 BRIGADE OPORD**

- a. Commander's intent understood at TF level and by engineers
- b. Commander's priority for obstacle emplacement clear
- c. Guidance on FASCAM allocation and employment guidance is clear
- d. Obstacle plan linkage with maneuver scheme understood
- e. CL IV/V barrier/obstacle materiel allocated and requested
- f. Brigade directed obstacles priority, work and responsibilities clear

**TF-1 TASK FORCE OPORD**

- a. TF Commander's intent understood by TF Key Personnel (Engineers)
- b. Obstacle plan linkage with maneuver scheme understood
- c. CDRS priority and sequence for obstacle emplacement clear and understood
- d. FASCAM employment and employment criteria clear and understood
- e. Engineer understands purpose of obstacle
- f. FSO and S-3 Air understand obstacle purpose
- g. S-4 understands CL IV/V barrier materiel needs
- h. S-4 requisitions required supplies
- i. Appropriate control measures are included
- j. Responsibility for emplacement of all obstacles and work effort

**E-1 ENGINEER ANNEX - BDE OPORD**

- a. Engineer execution matrix includes all critical information
- b. Prioritization of obstacles and work effort
- c. Brigade directed obstacles
- d. FASCAM targets
- e. Coordination linkups with maneuver units

**E-2 ENGINEER ANNEX - TF OPORD**

- a. Engineer execution matrix includes all critical information
  - 1) Obstacle location
  - 2) Prioritization of obstacles
  - 3) Responsible individual/organization
  - 4) Resources required
- b. FASCAM target deployment
- c. Brigade directed obstacles
- d. Coordination linkups with maneuver units



**TF-2\* TASK FORCE TACTICAL SOP**

- a. Responsibility for movement and breakdown of barrier/obstacle materiel and supplies
- b. Responsibility for final siting of obstacle
- c. Responsibility for obstacle site security
- d. Responsibility for securing obstacle once completed
- e. Responsibility for covering obstacle by direct and indirect fire
- f. Responsibility for obstacle prep and engineer asset management
- g. Responsibility for closing gaps in obstacle
- h. Responsibility for movement through lanes and gaps in obstacles

**C-I CO/TM OPORD**

- a. Direct fire weapons system positioning to cover/secure obstacles
- b. How to avoid repositioning of emplaced obstacles during direct fire
- c. Responsibility for executing indirect fires to cover obstacles
- d. Responsibility for closing gaps in obstacles
- e. Responsibility for unit to construct barrier/obstacles with unit assets

\*If unit SOP does not address these items, then they must be addressed in the order.

**TASK LIST SUMMARY FOR CCF 23**

See CCF 18 for analysis of planning process. CCF 18 addresses all planning tasks.

Tasks identified in this list are those considered by analysts as integral to CCF 23.

- PLANNING**
1. Understand commander's intent (FM 5-102, Chap. 4)
  2. Conduct mission analysis (MTP 5-145-11, Task 05-3-1239-1, 05-3-1018-1)
  3. Understand control measures (FM 5-102, Chap. 2)
  4. Initiate planning process (FM 5-102, Chap. 4)
  5. Issue warning order (MTP 5-145-11, Task 05-3-1018-2)
  6. Conduct leaders recon (MTP 5-145-11, Task 05-3-1018-5, 05-3-0112-3, 05-5-0306-2, 05-4-0301-1)
  7. Conduct terrain analysis (FM 5-102, Chap. 4)
  8. Determine possible obstacle locations and types (FM 5-102, Chap. 4)
  9. Determine obstacle priorities (MTP 5-145-11, Task 05-3-0112-4 & 5)
  10. Determine resources (MTP 5-145-11, Task 05-3-0112-4 & 5)
  11. Task organize engineer assets (MTP 5-145-11, Task 05-4-0301-1)
  12. Plan combat service support (MTP 5-145-11, Task 05-3-1208-7)
  13. Develop a tentative plan (MTP 5-145-11, Task 05-3-1018-3)
  14. Coordinate with maneuver units (MTP 12-16-1, Task 05-3-1239-2 & 3)
  15. Coordinate FASCAM employment (MTP 5-145-11, Task 05-3-1239-3)
  16. Plan for control of supporting resources (MTP 5-145-11, Task 05-3-1018-1)
  17. Plan for limited visibility operations (FM 5-102, Chap. 4)
  18. Plan for obstacle handover (FM 5-102, Chap. 4)
  19. Report intention to lay minefield (MTP 5-145-11, Task 05-3-1218, 05-3-0112-6)
  20. Prioritize the work effort (MTP 5-145-11, Task 05-3-1018-6)
  21. Issue operations order (MTP 5-145-11, Task 05-0201-3, 05-4-0205-3, 05-3-1018-7)

22. Graphically illustrate the obstacle plan (MTP 5-145-31, Task 05-2-0003)

**PREPARATION**

23. Conduct pre-combat checks (MTP 5-145-11, Task 05-5-0306-4)
24. Occupy obstacle site (MTP 5-145-11, Task 05-3-0112-8 & 10, 05-3-0904; 05-4-0201-4, 05-4-0205-4, 05-3-1216-2)
25. Utilize combat service support assets (MTP 5-145-31, Task 05-2-0042)
26. Prepare for obstacle handover (FM 5-102, Chap. 3)
27. Conduct briefbacks (MTP 5-145-11, Task 05-3-1018-8, 05-4-0201-1, 05-4-0205-1)
28. Supervise the implementation of plans and orders (MTP 5-145-11, Task 05-8-1018-8)
29. Assemble construction assets (MTP 5-145-11, Task 05-3-0112-6 & 8, 05-3-0209-4, 05-4-0301-1)
30. Report obstacle initiation (MTP 5-145-11, Task 05-0012-9 & 12, 05-3-0307-5, 05-3-0208-7)
31. Coordinate with maneuver units (MTP 5-145-11, Task 05-5-0306-4)

**EXECUTION**

32. Comply with commander's intent (FM 5-102, Chap. 4)
33. Maintain contact with adjacent units (MTP 5-145-11, Task 05-3-1216-3)
34. Construct obstacles (MTP 5-145-11, Task 05-4-0301-2)
35. Mark minefields (MTP 5-145-11, Task 05-4-0110)
36. Report obstacle status (MTP 5-145-11, Task 05-4-0205-13, 05-4-0301-7, 05-5-0306-9, 05-3-0108-7)
37. Conduct obstacle handover (MTP 5-145-11, Task 05-3-1216-3)
38. Execute FASCAM plan (FM 5-102, Chap. 5)

## PROVIDE COUNTERMOBILITY PLANNING TASK LIST

See CCF 18 for detailed analysis of planning process and planning tasks. Tasks identified on this list are considered by the analyst as critical to CCF 23.

**\*1. Understand Commander's Intent (FM 5-102, Chap 4).**

NOTE: The obstacle plan supports the task force concept of operations.

**\*9. Determine Obstacle Priorities (MTP 5-145-11, Task 05-3-0112-4 & 5)**

- a. Obstacle priorities are confirmed with the task force commander.
- b. High priority obstacles are identified.
- c. Priority of effort is established.

**\*10. Determine Resources (MTP 5-145-11, Task 05-3-0112-4 & 5)**

- a. Resource requirements are calculated.
  - 1) Manpower.
  - 2) Equipment.
  - 3) Barrier Material.
  - 4) Logistics support.
- b. Time requirements are identified.
  - 1) Time for material procurement.
  - 2) Obstacle construction time.
- c. Transportation requirements are determined.
  - 1) Transportation available.
  - 2) Transportation required.
  - 3) Transportation priorities are established.
- d. Obstacle handover procedures are determined.

**\*13. Develop a Tentative Plan (MTP 5-145-11, Task 05-3-1018-3)**

- a. A concept of operation is derived which directs initial subordinate actions and provides the basis for further coordination, reconnaissance, organization, and movement.

- b. Subordinate responsibilities are designated.
- c. Appropriate control measures are designated.
- d. Assets are effectively utilized in support of the designated priority of work.

**\*14. Coordinate With Maneuver Units (MTP 5-145-11, Task 05-3-1239-2 & 3)**

- a. Obstacle sites are confirmed.
  - 1) Support scheme of maneuver.
  - 2) Reinforce engagement areas.
  - 3) Tied into other obstacles and terrain.
- b. Coverage of obstacles is confirmed.
  - 1) Observation by maneuver unit.
  - 2) Direct fires.
  - 3) Indirect fires.
- c. Movement control measures are confirmed.
  - 1) Passage of lines routes.
  - 2) Lanes and gaps.

**\*20. Prioritize The Work Effort (MTP 5-145-11, Task 05-3-1018-6).**

NOTE: The Obstacle Plan correctly designates the following:

- a. Priority of obstacle preparation
- b. Sequence of preparation effort
- c. Allocation of available resources
- d. Responsibilities for each activity

**\*21. Issue Operations Order (MTP 5-145-11, Task 05-0201-3, 05-4-0205-3, 05-3-1018-7)**

- a. All subordinate and supporting leaders are present.
- b. All subordinate leaders are provided a minimum of the following:
  - 1) Graphic overlay
  - 2) Execution matrix
- c. The area of operation is appropriately portrayed during the presentation.
- d. All personnel understand expected actions.

\* These tasks are performed as part of CCF 18.

**PROVIDE COUNTERMOBILITY  
PREPARATION TASK LIST**

- 23. Conduct Pre-combat Checks (MTP 5-145-11, Task 05-5-0306-4)**
- a. Maintenance readiness is confirmed for the following:
    - 1) Weapon systems.
    - 2) Combat vehicles.
    - 3) Mission essential equipment.
  - b. Material readiness is confirmed for the following:
    - 1) Class V.
    - 2) Class III.
  - c. Personnel readiness is confirmed for the following:
    - 1) Equipment.
    - 2) Accountability.
- 24. Occupy Obstacle Site (MTP 05-145-11, Task 05-3-0112-8 & 10, 05-3-0904; 05-4-0201-4, 05-4-0205-4, 05-3-1216-2)**
- a. All necessary equipment and material are accessible at the obstacle site.
    - 1) Equipment dump sites are established.
    - 2) A mine dump is established on the friendly side of the minefield.
  - b. The site is secured from enemy activity.
  - c. The work party establishes contact with maneuver units to confirm:
    - 1) Security.
    - 2) Movement routes into and out of the area.
    - 3) Passage points.
    - 4) Passwords and call signs.
- 25. Utilize Combat Service Support Assets (MTP 5-145-31, Task 05-2-0042)**
- a. CSS assets are effectively utilized to meet operational requirements.
    - 1) Transportation assets.
    - 2) Service assets.
    - 3) Supply assets.
  - b. Engineer supplies are available in enough quantity to ensure continuous obstacle construction.

- 1) Class V.
- 2) Class IV.

**26. Prepare for Obstacle Handover (FM 5-102, Chap. 3).**

NOTE: Specific maneuver units are prepared to assume responsibility for:

- 1) Obstacles.
- 2) Minefields.
- 3) Lanes and gaps.

**27. Conduct Briefbacks (MTP 5-145-11, Task 05-3-1018-8, 05-4-0201-1, 05-4-0205-1)**

- a. A walk through of the mission with subordinate leaders is conducted.
  - 1) All critical aspects of the mission are covered.
  - 2) Subordinates understand mission requirements.
  - 3) Responsibilities are fully understood.
  - 4) Schedule of preparation is understood.
- b. Technical information from the obstacle plan is confirmed.
- c. Each element understands their mission.

**28. Supervise the Implementation of Plans and Orders (MTP 5-145-11, Task 05-8-1018-3)**

- a. Integration between obstacles and maneuver units is confirmed.
- b. Designated priorities are followed.
- c. Engineer assets are appropriately employed.
- d. CSS assets are supporting the obstacle effort as planned.
- e. Appropriate inspections are conducted to ensure the readiness of personnel.

**29. Assemble Construction Assets (MTP 5-145-11, Task 05-3-0112-6 & 8, 05-3-0209-4, 05-4-0301-1)**

- a. All required equipment and material are assembled.
  - 1) Amount of barrier material for each obstacle is confirmed.
  - 2) Material is located for easy access.
  - 3) Material stockage is complete.
- b. Work parties are organized.

30. **Report Obstacle Initiation** (MTP 5-145-11, Task 05-0012-9 & 12, 05-3-0307-5, 05-3-0208-7)
  - a. The initiation of obstacle construction is reported and includes the following information:
    - 1) Time.
    - 2) Location.
    - 3) Target number.
  - b. Construction progress reports are sent as planned.
  
31. **Coordinate with Maneuver Units** (MTP 5-145-11, Task 05-5-0306-4)
  - a. The location of the obstacle is consistent with maneuver unit's tactical plan.
  - b. The composition of the obstacle is consistent with maneuver unit's tactical plan.
  - c. The obstacle enhances the maneuver units fire plan.
  - d. The obstacle is fully covered by observation and fire.
  - e. Job site security is confirmed.



**PROVIDE COUNTERMOBILITY  
EXECUTION TASK LIST**

32. **Comply with Commander's Intent (FM 5-102, Chap. 4)**
  - a. Specified tasks are accomplished.
  - b. Implied tasks are accomplished.
  - c. The outcomes desired by the commander are attained.
  - d. Obstacles support the task force scheme of maneuver.
  - e. Obstacles halt or canalize the enemy force as designated by the task force commander.
  
33. **Maintain Contact with Adjacent Units (MTP 5-145-11, Task 05-3-1216-3)**
  - a. All obstacles are coordinated through the appropriate company/team commander prior to placement.
  - b. All movement in and around obstacles is controlled.
  - c. No losses to friendly forces occur due to obstacles.
  
34. **Construct Obstacles (MTP 5-145-11, Task 05-4-0301-2)**
  - a. Obstacles are constructed following prescribed standards.
    - 1) Minefields.
    - 2) Wire obstacles.
    - 3) Tank ditches.
    - 4) Craters.
    - 5) Abatis.
    - 6) Log obstacles.
  - b. Obstacle construction follows the task force directed priority of effort.
  - c. Obstacle are emplaced for the greatest effect.
  - d. Obstacle are covered by direct fires.
  - e. All obstacles are covered by indirect fires.
  - f. Obstacles are constructed to deny cover to breaching enemy forces.
  
35. **Mark Minefield (MTP 5-145-11, Task 05-4-0110)**
  - a. Minefields are visually marked.
  - b. All minefields are correctly recorded on DA Form 1555 or 1555-1-R as appropriate.

36. **Report Obstacle Status** (MTP 5-145-11, Task 05-4-0205-13, 05-4-0301-7, 05-5-0306-9, 05-3-0108-7)
- a. Obstacle completion is reported to higher headquarters.
    - 1) Obstacle dimensions.
    - 2) Obstacle depth.
    - 3) Bypass routes.
    - 4) Gaps and lanes.
  - b. The task force is aware of the work status of all obstacles.
37. **Conduct Obstacle Handover** (MTP 5-145-11, Task 05-3-1216-3)
- a. The work crew conducts a reentry of lines.
  - b. Responsibility for emplaced obstacles is totally assumed by the maneuver company commander within whose sector they lie.
  - c. Responsibility for obstacle lane closure is assumed by the maneuver company commander within whose sector they lie.
  - d. Turn over of obstacles is accomplished without disruption to the scheme of maneuver.
  - e. Gaps and lanes are closed in accordance with prearranged signals and/or events that support the task force scheme of maneuver.
38. **Execute FASCAM Plan** (FM 5-102, Chap. 5)
- a. All FASCAM missions are executed at the prescribed time and/or event.
  - b. All FASCAM employments are responsive to the demands of the commander.
  - c. All FASCAM missions are accurately emplaced on their pre-designated targets.

**CALL LESSONS LEARNED RELEVANT TO CCF 23  
(EXTRACTS FROM LESSONS LEARNED BULLETINS)**

**1. NTC Commanders Memorandum – Nov 85**

The Brigade order should direct engineer obstacle targets that are located at obvious terrain locations and the work should begin on these obstacles even before the TF order is completed. This gets the engineer work started as early in the preparation phase of the battle as possible.

Standard packages of Class IV should be pushed forward as early as possible so obstacles can be constructed ASAP. The remainder of the required Class IV and V material can be provided as soon as it become available.

FASCAM must be carefully planned by the Engineer, FSO and S-3.

All obstacles should be reinforced with mines and covered with direct and registered indirect fire.

**2. Lessons Learned Bulletin – Jan 86**

The TF Engineer must brief his engineer estimate in clear and concise terms the TF Cdr can understand.

The TF Cdr must provide the engineer priorities by specific task (target).

The TF Cdr must state the intent of the obstacle.

Responsibility for the obstacle after completion should be the maneuver/command responsibility. The coordination responsibility for each obstacle between engineer and maneuver Cdr must be clearly stated by the TF Cdr.

Responsibility for the obstacle after completion should be the maneuver Commander. This responsibility includes obstacle site security, securing the obstacle, coverage of the obstacle by fire and lane closing.

**3. Lessons Learned Bulletin – July 86**

Use deception and OPSEC to confuse the enemy as to where and for what purpose obstacles are emplaced.

Ensure obstacle and FS plans are synchronized throughout the depth of the battlefield.

Consider FASCAM in enemy territory.

Employ obstacles along flanks.

**4. Lessons Learned Bulletin – Sept 86**

The employment of FASCAM requires detailed planning among the commander, S3, S4, Engineer, and FSO. Considerations include:

- a. Logistic impact of providing high density FASCAM minefield.
- b. Delivery times.
- c. Optimum terrain for FASCAM effectiveness.
- d. Range of Arty delivery.
- e. Weather impact on FASCAM effectiveness.
- f. Consider friendly use of terrain targeted.
- g. Cover FASCAM minefield with friendly fires.
- h. Commanders priority for FASCAM employment.
- i. Use to isolate OBJ.
- j. Tie in FASCAM with hindering terrain or other obstacles.
- k. Use FASCAM for flank security.

The siting of obstacles must begin with identifying engagement area kill zones where direct fire is most effective and then site the obstacle to canalize, slow or stop the enemy in the kill zone.

Maneuver Company Commanders have the responsibility:

- a. For final siting of the obstacle.
- b. For covering the obstacle by fire.
- c. To secure the obstacle.

Obstacle should be emplaced in depth.

**5. Lessons Learned Bulletin – Feb 87**

Plan engineer work on obstacles beyond the expected enemy attack time. Engineer work can continue in the depth of a defenders sector while the enemy is being engaged forward.

Engineer assets must be managed carefully throughout the battle. Engineer equipment crew rest, maintenance of the equipment, supply of POL and Class IX, HET movers, handover of engineer assets from one site (unit) to the next, are examples of management requirements.

Engineer C2 must be planned. The engineer platoon leader has a rough time being an executor and the TF Engineer for planning purposes. Consider moving experienced engineers from the engineer company or battalion. Unit HQ's forward to conduct the TF engineer planning.

Train with and use Engineer execution matrixes.

Consider assigning an obstacle "manager" from the TF staff to oversee the management responsibilities for obstacles.

It is critical for the TOC/CDR to know the progress and completion of obstacle emplacement.

**6. Lessons Learned Bulletin – July 87**

The engineer responsible for TF planning must have accurate planning factors with which to provide input to the maneuver commander and upon which to base the engineer estimate.

The barrier and obstacle materiel requisition, transportation, distribution and control responsibilities must be clearly understood and outlined by the TF Cdr.

The TF engineer determines materiel requirements and then uses the materiel to emplace the obstacle; the maneuver Cdr and Staff are responsible for the supply and transportation, security and control of the materiel.

**7. Lessons Learned Bulletin – Fall 88**

Use an engineer officer other than a supporting Engineer Platoon leader to act as the TF engineer for planning.

Fix responsibility for engineer obstacle work with a maneuver Cdr.

The maneuver commander is responsible for obstacle siting.

Train with and use Engineer Execution Matrixes to clarify work to be done, who is responsible and other critical info.

**8. Lessons Learned Bulletin – Jun 90**

There must be backup responsible individuals assigned to fire, direct or indirect fires on an obstacle. The responsible person must understand intent, triggers, frequencies, target numbers and other key info needed to secure the obstacle from enemy breaching and reduction.

Rehearse!

## LESSONS LEARNED INTEGRATED INTO CCF 23 TASK LIST

### PLANNING

1. Understand Commander's intent. (FM 5-102, Chap. 4)

The Engineer and other key participants must understand the purpose of each obstacle.

2. Conduct mission analysis
3. Understand control measures
4. Initiate planning process

The engineer planner must have accurate planning factors available with which to provide input to the commander during the wargame.

Assign an experienced engineer other than the engineer platoon leader as the maneuver force engineer planner. The engineer platoon leader has a difficult time acting as the planner and leading his platoon and frequently lacks the experience to properly plan complex engineer work.

5. Issue warning order
6. Conduct leaders reconnaissance
7. Conduct a terrain analysis
8. Determine possible obstacle locations and types

The Brigade should select Brigade Obstacle at obvious terrain locations and direct priority of work on these at once prior to the TF order.

Consider FASCAM targets in enemy territory.

Employ obstacles along flanks.

The siting of obstacles must begin with the maneuver commander identifying the engagement area kill zone where the fires are to destroy the enemy; then site the obstacle to canalize, slow or stop the enemy at that location.

Obstacles should be employed in depth.

9. Determine obstacle priorities

The commander must provide the engineer and subordinate commanders his priority for obstacles.

Plan engineer work on obstacles in depth beyond the time of expected enemy contact.

10. Determine resources

The engineer must develop the estimate using valid planning factors.

Determine the logistics impact of employing high density FASCAM minefields.

11. Task organize engineer assets

Use an experienced engineer from engineer BN or Co as the maneuver HQ engineer planner.

12. Plan combat service support

The engineer digging equipment must have dedicated CSS support.

13. Develop a tentative plan.

Develop deception and OPSEC measures to deny the enemy location and purpose of the obstacles.

14. Coordinate with maneuver units.

The obstacles must be covered by direct and indirect fires throughout the depth of the battlefield.

There must be designated and backup individuals responsible for ensuring direct and indirect fires are delivered on obstacles to cover and protect the obstacles. These individuals must understand the intent of the obstacle, know trigger lines, have the radio and frequencies, and target numbers in order to deliver these fires.

15. Coordinate FASCAM employment.

The employment of FASCAM requires detailed planning and coordination among the TF S3, S4, Engineer., and FSO. Considerations include:

- a. Logistical impact of high density FASCAM minefields.
- b. Delivery times.
- c. Optimum terrain for FASCAM employment.
- d. Range of artillery delivery means.
- e. Weather impact on FASCAM effectiveness.
- f. Consider friendly use of terrain targeted.
- g. Cover FASCAM target with friendly fires.
- h. Employment considerations (use on flanks, in enemy territory, or to isolate the objective).
- i. Tie in with hindering terrain or other obstacles.
- j. Commanders criteria and priority for employment.

16. Plan for control of supporting resources.

The maneuver commander must identify from his staff an "obstacle manager", responsible for managing all aspects of obstacle assets; equipment handover, maintenance and supply for equipment, operator crew rest are examples of these management responsibilities.

The maneuver HQ is responsible for the supply and transportation of Class IV/V materiel.

17. Plan for limited visibility operations.

18. Plan for obstacle handover.

The maneuver commanders at the obstacle site should be responsible for the obstacle once it is completed.

19. Report intention to lay a minefield.

20. Prioritize the work effort.

Develop and use an Engineer Execution Matrix.

Use an Engineer Execution Matrix to guide and direct obstacle emplacement.

22. Graphically illustrate the obstacle plan.

## PREPARATION

23. Conduct briefbacks.

In addition to briefbacks, a rehearsal should be conducted to ensure the obstacle, maneuver and fire support plans are synchronized.

24. Supervise the implementation of plans and orders.

Use an "obstacle manger" to supervise and coordinate the implementation of the plan.

25. Assemble construction assets.

The maneuver headquarters is responsible for requisitioning, delivering, securing, assembling and controlling construction assets at the obstacle site. The engineer is responsible for determining assets needed and using them to construct the obstacle.

Standard packages of Class IV/V should be pushed forward as soon as possible to speed up obstacle work. Additional required materiel can be provided as it comes available.

26. Report obstacle initiation.

27. Coordinate with maneuver units.

The maneuver commander must determine the final siting of the obstacle based on the siting of the direct fire weapons positions.

The maneuver commander is responsible for security of the obstacle work site.

The maneuver commander must ensure the obstacle is secured and is covered by fires.

28. Conduct pre-combat checks.

Use deception and OPSEC to confuse the enemy as to the location and intent of the obstacles.

29. Occupy obstacle site.



30. Utilize combat service support assets.

Class IV/V materiel immediately available to the maneuver headquarters must be moved immediately to the obstacle sites. Consider using aerial supply.

31. Prepare for obstacle handover.

#### EXECUTION

32. Comply with commanders intent.

33. Maintain contact with adjacent units.

34. Construct obstacles.

All obstacles must be reinforced with mines and covered with direct and registered indirect fires.

35. Mark minefields.

36. Report obstacle status.

The TOC and the commander must know the progress of obstacle construction.

37. Conduct obstacle handover.

The maneuver commander assumes responsibility for the obstacles once completed; this includes security of the obstacle, covering the obstacle by fires and closing obstacle gaps.

38. Execute FASCAM plan.

**CCF 23  
CRITICAL TASKS AND OTHER LINKAGES**

<u>TASK</u>	<u>OTHER LINKAGES</u>
[1] Understand CDR's intent	
[9] Determine obstacle priorities	
[10] Determine resources	
[13] Develop a tentative plan	
[14] Coordinate with maneuver units	
[20] Prioritize the work effort	<ul style="list-style-type: none"> <li>• Platoon leader assigns construction tasks</li> </ul>
[21] Issue OPORD so that it is understood by TF.	
[23] Conduct backs (and rehearsal's)	
[25] Assemble construction assets <ul style="list-style-type: none"> <li>a. Equipment and personnel</li> <li>b. Materiel</li> </ul>	
[27] Coordinate with maneuver units	
[29] Occupy obstacle site	
[34] Construct obstacles	Platoons: <ul style="list-style-type: none"> <li>• Replace obstacles</li> <li>• Direct installation/removal of a Hasty protection minefield (SL4, Task 051-192-3032, STP 7-11B)</li> <li>• Squads construct obstacles</li> <li>• Co/Co Tm emplaces obstacles (Task 17-2-0502, ARTEP 71-1-MTP)</li> <li>• Dozer operator skills</li> </ul>
[36] Report obstacle status	
[37] Conduct obstacle handover	<ul style="list-style-type: none"> <li>• Platoon leader transfers obstacle to gain unit</li> </ul>

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**FMs**

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- 5-102                      Countermobility, March 85
- 71-2                        The Tank and Mechanized Infantry Battalion Task Force,  
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**ARTEP Mission Training Plans**

- 5-145-11-MTP             MTP for the Combat Engineer Platoon, February 89
- 5-145-31-MTP             MTP for the HHC, Engineer Battalion, February 89
- 71-1-MTP                  MTP for the Tank and Mechanized Infantry Company and Team,  
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- 71-2-MTP                  The Tank and Mechanized Infantry Battalion Task Force,  
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- 71-3-MTP                  MTP for the Heavy Brigade Commander Group and Staff,  
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**STPs**

- 5-12B1-SM                 Soldier's Manual, skill levels 2/3/4, and Trainer's Guide, MOS  
12B, Combat Engineer.
- 5-12B24-SM-TB            Soldier's Manual and Trainer's Guide, MOS 12B, Combat  
Engineer  
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- 5-21-II-MQS                Military Qualification Standards II Manual, Branch Code 21,  
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