

CHAPTER 2

COMMAND AND CONTROL

This chapter describes task force command and control principles, procedures, and techniques, and it outlines a system that allows the task force commander to apply the concepts of AirLand Battle doctrine and win.

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Section I. COMMAND AND CONTROL RESPONSIBILITIES

Command and control is the process through which the activities of the task force are planned, directed, coordinated, and controlled to accomplish the mission. This process encompasses the personnel, equipment, communications, facilities, and procedures necessary to gather and analyze information, to plan, to issue instructions, and to supervise the execution of operations. The commander is responsible for command and control of organic, assigned, attached, and supporting forces, and for their synchronization into his operation.

Effective leadership is foremost among the elements of combat power that will decide victory. The leader must have a reliable, secure, fast, and durable command and control system. This system must communicate orders, coordinate support, and provide direction to the task force in spite of enemy interference and the loss of command facilities and key individuals.

The command and control system must be faster and more effective than the enemy's system. This allows the commander to receive and process information and to make and execute decisions faster than the enemy. The overriding goal of this system is to implement the commander's will in pursuit of an objective.

2-1. ORGANIZATION

The battalion commander determines the command and control organization that best supports his method of operations. He organizes his staff, determines the succession of command, and assigns responsibilities. The command and control organization is established by task force SOP. The typical task force command and control organization is shown in Figure 2-1.

2-2. RESPONSIBILITIES

The battalion staff is composed of personal, coordinating, and special staffs. The responsibilities of the members of the command and control organization are outlined below. The commander may modify these responsibilities based on the situation and individual capabilities.

- a. **Battalion Task Force Commander.** The commander commands all elements of the task force. He provides his subordinates with missions, taskings, and a clear statement of his intent. The

commander allows subordinates freedom of action in implementing his orders.

- b. **Executive Officer.** The XO is the principal assistant to the battalion commander. He is the battalion "chief of staff," and he is second in command. He is the principal integrator of CSS in support of maneuver. During the commander's absence, he represents the commander and directs action in accordance with established command policy and guidance. During the battle, he is normally in the main command post where he monitors the battle, reports to higher headquarters, keeps abreast of the situation at higher headquarters and units on the flanks, integrates CS and CSS into the overall plan, and plans for future operations. He is free to move to any point in the area of operations to accomplish his duties and responsibilities.

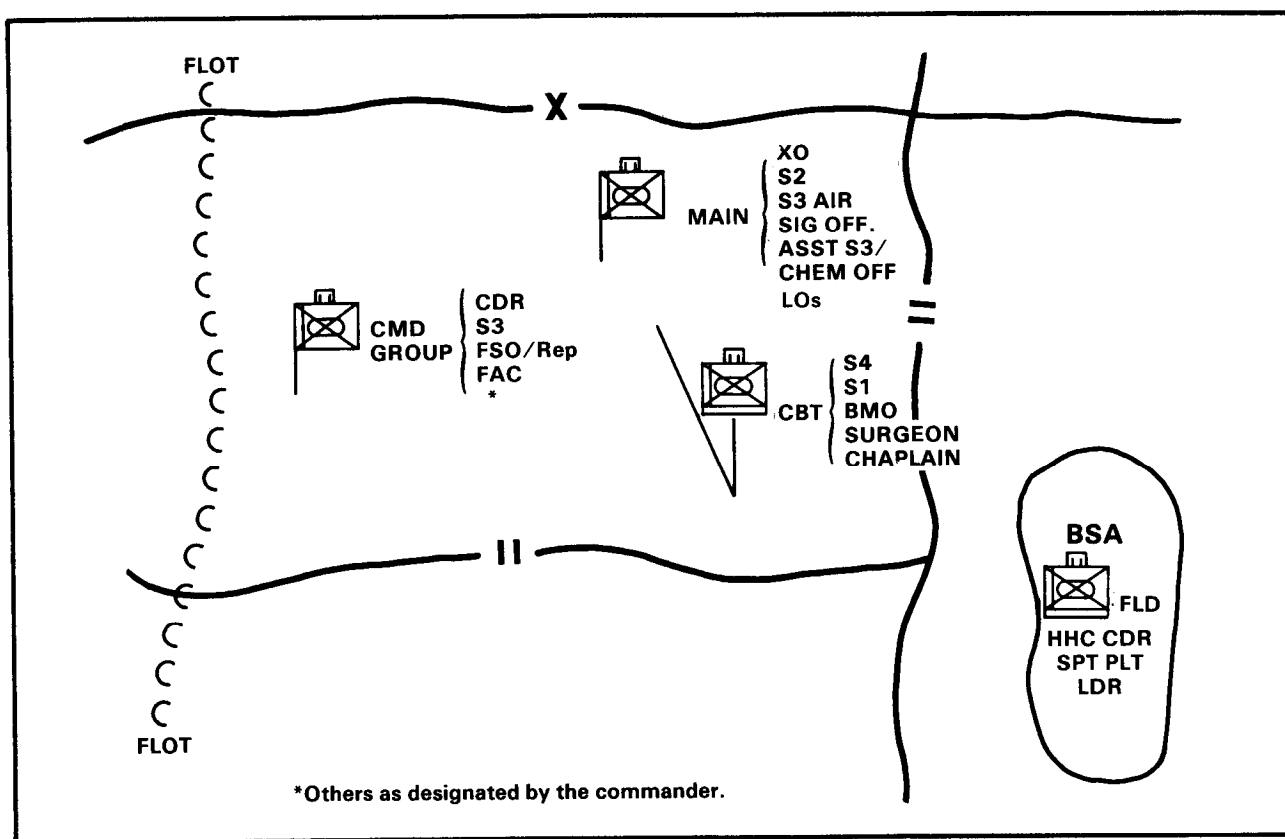


Figure 2-1. Command and control organization on the battlefield

- c. **Command Sergeant Major.** The command sergeant major (CSM) is on the commander's personal staff and is his primary advisor concerning enlisted soldiers. He must know the administrative, logistical, and operational functions of the battalion. Since he is the most experienced enlisted soldier in the battalion, his attention is focused on soldier and soldier support matters. The CSM may act as the commander's troubleshooter in supervising critical aspects of an operation. The CSM may also perform critical liaison, coordinate passage of lines, lead advance or quartering parties, supervise at key breach/ford sites, monitor key defensive preparations, assist in the CSS effort, and monitor unit morale.
- d. **Coordinating Staff.** The coordinating staff officers are the principal staff assistants to the commander.
 - (1) **S1 (adjutant).** The S1 is a principal staff officer with responsibility for exercising staff functions and coordination for personnel service support. Personnel service support encompasses the areas of personnel service, administrative services, health service support, finance support, postal services, chaplain activities, legal service support, morale, welfare support activities, and public affairs. The S1 is the assistant officer in charge of the combat trains CP, usually acting as a shift leader.
 - (2) **S2 (intelligence officer).** The S2 is responsible for combat intelligence. He organizes for continuous combat operations in coordination with the S3. The S2 coordinates input from the other staff officers. During operations, he updates the IPB and prepares and monitors reconnaissance and surveillance plans in conjunction with the S3. He provides staff supervision over supporting intelligence organizations and requests additional support from brigade to support the commander's intelligence requirements. He normally performs his duties in the main CP.
 - (3) **S3 (operations and training officer).** The S3 is responsible for planning, organizing the force and coordinating combat operations of the battalion and attached/OPCON units, and for coordinating with combat support units. He coordinates with the S2, FSO, and other combat support planners in preparing the task force order. He is responsible for integrating combat support (engineer operations, ADA, indirect fires, CAS, EW, Army aviation, and C³CM) into task force operations. He assists the commander in fighting the ongoing battle. The S3 operates forward with the commander.

- (4) **S4 (logistics officer).** The S4 is responsible for all battalion logistical activities. He supervises all organic and nonorganic logistical elements supporting the task force. He is responsible for the formulation of logistical policy. He plans, coordinates, and supervises the logistical effort, to include coordinating all aspects of CSS in paragraph 4 of the task force order with the S1 and the BMO. The S4 is responsible for the arrangement, security, and movement of the combat trains, and is the OIC of the combat trains CP.
 - (5) **Battalion maintenance officer.** The BMO plans, coordinates, and supervises the maintenance and recovery efforts of the maintenance platoon and ensures that adequate maintenance support is provided to the task force. Although a staff officer in the battalion headquarters, he is also the maintenance platoon leader. The maintenance warrant officer assists the BMO by providing technical assistance and supervision of the maintenance platoon. The BMO supervises the unit maintenance collection point (UMCP).
- e. **Special Staff.** Special staff officers assist the commander in command and control in special areas of expertise, generally under the direct supervision of a member of the coordinating staff.
- (1) **S3 Air.** The S3 Air is the principal assistant to the S3. As the battalion link to the Army airspace command and control system, he coordinates use of battalion airspace and the employment of air support with the FSO (FSCoord), the tactical air control party (TACP), and the aviation liaison officer, as well as the air defense section or platoon leader. The S3 Air works in the main CP.
 - (2) **Assistant S3/chemical officer.** The chemical officer is responsible for advising the commander on impacts of NBC employment on current or future operations. He coordinates and plans decontamination and smoke operations. He is located at the main CP.
 - (3) **Tactical intelligence officer.** The tactical intelligence officer works under the supervision of the S2 and is part of the two-man battlefield information control center (BICC). The BICC's primary responsibility is to perform unit intelligence collection, processing, and disseminating actions as tasked by the S2. The BICC operates in the main CP.
 - (4) **Liaison officers.** LOs are commissioned and noncommissioned officers who represent their commander at other headquarters. Through personal contact, they promote

cooperation and coordination, and facilitate the exchange of information. LOs are tasked with general coordination instructions in the task force SOP and with specific coordination instructions each time they are dispatched to another headquarters. Their role as task force commander representative requires LOs to know all task force plans and dispositions. LOs ensure that critical information is passed between the task force headquarters and the headquarters to which they are dispatched. When operating in the main CP, LOs are supervised by the shift OIC.

- (5) **Battalion signal officer.** The battalion signal officer, in addition to leading the communications platoon, exercises technical supervision over the installation and use of communication systems and the activities of communications personnel. His specific duties are directed by the battalion S3. He reconnoiters possible CP sites for communications capabilities; recommends retransmission equipment employment; establishes messenger services and schedules; and monitors COMSEC.
 - (6) **Battalion surgeon.** The battalion surgeon is the medical platoon leader. With the aid of a physician's assistant, he operates the battalion aid station in the combat trains. He and his assistant provide training for the medical platoon, treatment of the wounded, and information on the health of the battalion to the commander. A medical service corps officer and the platoon sergeant assist in the administration and the logistics of the medical platoon, and plan and coordinate patient evacuation to the supporting medical company.
 - (7) **Battalion chaplain.** The battalion chaplain provides religious services and personal counseling. As a special staff officer, he provides the commander with an in-depth view of the esprit de corps, spiritual well-being, and morale of the unit. Although he has a personal staff relationship with the commander, he coordinates his special staff actions through the S1, and operates from the combat trains.
- f. **Other Staff Assets.** The HHC commander, the task force FSO, the task force FAC, and the senior leaders of elements supporting the task force provide special staff assistance to the commander directly or through the primary staff.
- (1) **Headquarters and headquarters company commander.** The HHC commander is located in the task force field trains. He is responsible for coordination, security, and movement

of the field trains, both organic and attached. The HHC commander acts as a battalion task force CSS coordinator, assisting the S1 and S4 by ensuring that field trains support is smooth, timely, and efficient.

- (2) **Fire support officer.** The FSO is a habitually associated officer from the FA battalion in direct support of the brigade. He coordinates all fire support for battalion task force operations and as such, the battalion FSO is also the battalion FSCoord. The FSO establishes the fire support element at the main CP. The FSO monitors the positioning of the battalion mortar platoon and employs its fires. He also recommends the employment of any supporting field artillery assets. The FSO operates either from the main CP or forward with the commander.
- (3) **Forward air controller.** The FAC is a US Air Force officer responsible for coordination and employment of US Air Force assets in support of the task force. He is responsible for the tactical air control party as described in Chapter 7. He will primarily operate forward with the commander.
- (4) **Air defense artillery officer.** The senior leader of any supporting ADA unit(s) advises the commander on employment of ADA assets. During the planning process, he is at the main CP to ensure the integration of air defense into the concept of operation. During the execution of the plan, he positions himself to best command and control the air defense assets. He monitors the command net to remain responsive to the needs of the commander. He also monitors the early warning net to assist in the acquisition and dissemination of early warning information as a member of the Army airspace command and control system.
- (5) **Engineer.** The senior leader of any supporting engineer unit(s) also acts as a special staff officer advising the commander on employment of engineer assets. The task force engineer monitors the task force command net while directly supervising his unit during its operations.

Section II. COMMAND AND CONTROL FACILITIES

The task force command and control facilities consist of the vehicles and locations from which the task force commander, assisted by his staff, directs the battle and sustains the force. The exercise of command and control is focused in four major facilities — the main CP, the tactical CP, the combat trains CP, and the field trains CP.

2-3. MAIN COMMAND POST

The task force main CP is the control, coordination and communications center for combat operations. The main CP is composed of the S2 and S3 sections, the FSE, representatives from other attached elements, and the tactical CP (when not forward). The main CP vehicles and personnel must be as few as possible to allow for rapid displacement, but large enough to accomplish command and control functions in support of the commander.

- a. **Functions.** The functions of the main CP are to monitor and assist in command and control by maintaining contact and coordination with higher and adjacent units, continuously updating the enemy situation, planning operations, analyzing and disseminating tactical information, maintaining situation maps, and requesting and synchronizing additional CS and CSS for the battle. Factors that have immediate operational impact must be monitored by the main CP and communicated to the commander.
- b. **Operations.** The primary considerations in positioning the main CP are communications, accessibility, and survivability. The personnel who operate the main CP must be organized to provide both security and continuous operations on a 24-hour-a-day basis. A sleep plan must be enforced to preserve the ability of main CP personnel to perform continuous operations. The main CP internal SOP establishes this internal organization. Coordination between the main CP, the combat trains CP, and the field trains CP must be continuous to ensure that CSS is integrated into the mission effort. One technique is to monitor the administrative/logistics (A/L) net on a remote. When possible, a landline link is established with the combat trains CP. The security of the main CP is enhanced by its capability to displace rapidly and provide a reduced electronic signature. Displacements are planned to ensure the main CP is stationary during critical phases of the battle.
- c. **Alternate Main CP.** The combat trains CP is normally designated as the alternate main CP. (Aid station and UMCP assets may be collocated to enhance communications capability.) A mortar FDC track may also be used as an alternate main CP. If required to function as the main CP, the primary functions of these elements will suffer, and the effectiveness of the new main CP will also be degraded.

2-4. TACTICAL COMMAND POST

A tactical CP may be formed during fast-moving offensive or retrograde operations to maintain communications and facilitate the

movement of the main CP. In such circumstances the commander may designate one of the command post vehicles from the main CP to act as the tactical CP. Some or all of the command group may locate at the tactical CP at various times.

2-5. COMMAND GROUP

The command group consists of the commander and those he selects to go forward to assist him in controlling maneuver and fires during the battle. It normally includes the FSO, FAC, and S3. There is no requirement for these people to collocate; for example, the commander may be in one part of the battalion sector while the S3 might be in a separate part of the sector. The composition, nature, and tasks of the command group are determined by the commander to permit the optimum command and control of his unit during the battle.

2-6. COMBAT TRAINS COMMAND POST

- a. The combat trains CP is the coordination center for combat service support for the task force and the control element of the combat trains. It is positioned forward of the field trains. The S4 is responsible for operations, movement, and security of the combat trains, assisted by the S1. The S4, S1, and BMO must continually assess the situation, anticipate the needs of units, and prepare to push support forward. Anticipating requirements is the key to successful combat service support.
- b. The combat trains CP maintains the CSS status of the battalion. In preparation to assume its functions as alternate main CP, the combat trains CP monitors the task force command net and maintains charts and tactical situation maps identical to those at the main CP. The combat trains CP routinely operates a switchboard for elements in the combat trains and is the NCS for the battalion A/L net and operates in the brigade A/L net.
- c. Any change in the main effort of the battalion should be reported to the combat trains CP by the main CP or tactical CP. Similarly, a major change in the ability of the CSS system to support an operation must be immediately reported to the main CP by the combat trains CP. The combat trains CP relays information to the field trains CP.

2-7. FIELD TRAINS COMMAND POST

The field trains are under the control of the HHC commander whose headquarters is the field trains CP. When the TF commander collocates his field trains with the BSA, the HHC commander

coordinates with the forward support battalion for positioning and a defensive sector for the battalion field trains elements. When the task force commander deems it necessary, the field trains may be positioned outside of the BSA in the task force area of operations; in this case, the task force S3 designates the general location for the field trains or directs that unit trains be formed under the control of the S4.

- a. The field train CP is composed of the HHC commander, and the remaining elements of the S1 and S4 sections. It coordinates the collection and movement of CSS from the task force field trains and the forward support battalion, to forward elements of the task force. It controls and coordinates the activities of the task force field trains including operations of the support platoon, elements of the maintenance platoon in the field trains, company and attached units' supply sections, and the PAC. The field trains CP monitors the task force A/L net and maintains a communications link with the forward support battalion CP.
- b. Supplies, personnel, and mail going forward from the field trains are grouped together into logistics packages (LOGPACs) under the control of the support platoon leader or a company supply sergeant. The field trains CP organizes and dispatches LOGPACs based on instruction from the combat trains CP. (Chapter 7 contains detailed discussion of field trains operations.)
- c. The battalion trains are normally echeloned with both a combat trains CP and a field trains CP. The alternative configuration is to form unit trains with a single rear CP which is operated by the S4. In this case there is no field trains CP.

Section III. COMMAND AND CONTROL PROCESS

The task force command and control process involves planning, coordinating, and executing combat operations. While higher level headquarters give broad missions and allocate assets to fight the close and deep battle, task forces directly control and synchronize the actions of company teams, supporting fires and obstacles on the ground and against the enemy. Key command and control considerations for the battalion/task force commander include —

- Making maximum use of time.
- Conducting physical reconnaissance.
- Planning for and maintaining flexibility.

- Instilling and requiring initiative from all leaders.
- Decentralizing execution.
- Providing clear, concise missions.
- Synchronizing all assets.
- Designating and sustaining main effort.

2-8. PLANNING

Plans are the initial basis for action, but commanders must expect considerable variance from plans because the situation will change rapidly. After an initial order, task forces are usually directed by a series of FRAGOs with the commander continually making decisions to fight the battle.

- a. In planning an operation, the task force commander focuses on developing a concept of the operation that best accomplishes the task force's mission and the brigade's and division's intent. He assigns missions and tasks to subordinate elements and allocates forces and establishes priorities to make the concept work.
- b. Planning must be rapid to give adequate time for preparation, coordination, and planning. Planning is continuous. Initial plans are updated and refined but complete change is avoided especially if it negates subordinate planning and preparation.
- c. Plans must be simple to understand and prevent undue difficulty in execution. While conciseness is required in plans, there must be sufficient elaboration for understanding and coordination.
- d. Standing operating procedures that are detailed, understood, and practiced allow for short concise plans. Orders do not repeat SOP items understood by all subordinates.
- e. Routinely, the task force will have limited time to plan and prepare to conduct an operation, such as when receiving an immediate mission while acting as a reserve or conducting a movement to contact. During such situations, the troop-leading procedures are the basis for planning and preparation. The commander does a rapid estimate with the other members of the tactical CP. A quick radio update is provided by subordinates, and the commander and staff pass other information needs to the main CP over radio. The commander gathers his leaders to quickly explain the concept, visually show the concept on a map, hand out a few control graphics, and allow face-to-face coordination. A FRAGO sent over the radio is far less desirable but sometimes required.

2-9. FACTORS OF MISSION, ENEMY, TERRAIN (AND WEATHER), TROOPS AND TIME AVAILABLE

The factors of METT-T are considered during the development of all estimates, including IPB. Each factor must be evaluated in conjunction with the other factors in order to gain a true appreciation of the battlefield. A significant change in one or more of the factors of METT-T will usually cause change in the OPLAN or OPORD.

- a. **Mission.** The primary task assigned to the unit is its mission. The task force mission is given in the brigade OPORD or FRAGO. It contains key requirements in terms of who, what, when, where, and why. The commander conducts a detailed mission analysis to determine the role of the task force in the higher commander's operation, and the specified and implied tasks necessary for mission accomplishment. The "why" in the mission statement is the basis of the task force commander's intent for the operation. He develops his intent in terms of overall effect on the enemy, resulting task force positioning, and any activities that are otherwise critical to accomplish his higher commander's plan.
- b. **Enemy.**
 - (1) Enemy forces are evaluated to determine their capabilities, likely courses of action, and impact on task force courses of action. At the start of hostilities, or when the task force is assigned a new area of operations, information on the enemy force is initially provided by higher headquarters. Later, the task force may have first-hand information on the enemy, but will still require information from higher headquarters on enemy flank and second echelon forces.
 - (2) IPB includes a detailed analysis of the enemy and provides the commander with templates of likely enemy positions and enemy ground and air avenues of approach, as well as other information. The S2 begins the IPB process. In conjunction with the S3 and the commander, he develops probable time guidelines, templates of enemy positions or formations, named areas of interest (NAIs) and target areas of interest (TAIs). NAIs are areas that will most likely give indicators of enemy intentions; TAIs are areas to be attacked that will most likely have a damaging effect on enemy forces or plans.
 - (3) The task force uses its scouts, infantry patrols, and any supporting ground surveillance radars to verify enemy information. Additionally, maneuver companies' reports, calls for fire monitored by the fire support element (FSE),

and adjacent unit reports are reviewed to verify information and to disclose the enemy's intent.

c. Terrain (and Weather).

- (1) **Terrain.** Terrain analysis is the process of examining the military aspects of terrain and their effects on friendly and enemy capabilities to move, shoot, and communicate. The military aspects of terrain include the following five factors (OCOKA): Observation and fields of fire, Cover and concealment, Obstacles and movement, Key terrain, and Avenues of approach. The military aspects of terrain at battalion-level are considered in terms of platoon positions and actions.
- (2) **Weather.** Weather affects equipment, terrain (trafficability), visibility, and soldiers. Generally, adverse weather favors the attacker, even though mobility and command and control are degraded. Task force plans and orders must accommodate adverse weather (including the effects of smoke) and take advantage of them.

d. Troops. The commander evaluates troop strength and combat status in terms of the seven battlefield operating systems and human dimension factors such as fatigue, training, morale, and leadership. Maneuver companies, fire support, and engineer assets are initially the key elements considered.

e. Time Available.

- (1) Time is the critical factor in all operations. The commander gets his first indication of time available from the higher headquarters order. Specific considerations of time (and timing) include —
 - Coordination and planning time.
 - Time operation is to commence, and therefore the time available for preparation and reconnaissance.
 - Movement times from present positions to sectors, battle positions, or lines of departure.
- (2) Other timing considerations are considered during the wargaming process and include —
 - Rate of closure of a moving enemy force.
 - Movement times during the operation (moving from one battle position to another; time from one phase line to the next).

- Timing and duration of preparation fires or smoke.
- Time to complete specific actions during the operation.

2-10. DECISION-MAKING PROCESS

- a. Task force commanders manage time by ensuring that the leadership executes the troop-leading procedures and decision-making process simultaneously. The troop-leading procedures and decision-making process are complementary actions that continue in an uninterrupted manner from operation to operation.
- b. The decision-making process is as detailed — or as simple — as time allows. The commander plays the central role in this process, with the staff providing advice and information related to their respective areas (see Figure 2-2). The commander's decisions are based on his analysis of the factors of METT-T, staff input, information gained through reconnaissance, analysis and comparisons of feasible courses of action, wargaming, and his personal judgment. The decision-making process must be able to accommodate rapid changes on the battlefield. A detailed explanation of the formal decision-making process is in FM 101-5.

2-11. TROOP-LEADING PROCEDURES

- a. The following describes the task force command and control process — analysis of METT-T; estimate of the situation; decision-making; and troop-leading procedures. It applies to all types of tactical operations. Specific tactical considerations for the various types of task force missions are in appropriate chapters of this manual. **The troop-leading procedures can occur in almost any sequence, with several actions taking place simultaneously. Some actions, such as reconnoiter, may begin early and be repeated as often as required.** Figure 2-3 (page 2-16) shows the relationship of the factors of METT-T, the estimate of the situation, and the troop-leading procedures.
- b. Troop-leading procedures begin with an assigned or perceived mission and end with mission accomplishment.
 - (1) **Receive the mission.**
 - (a) On receipt of the mission, the task force commander and his staff exchange information and conduct a preliminary METT-T analysis. The initial analysis determines —
 - What is the mission (task and purpose)?

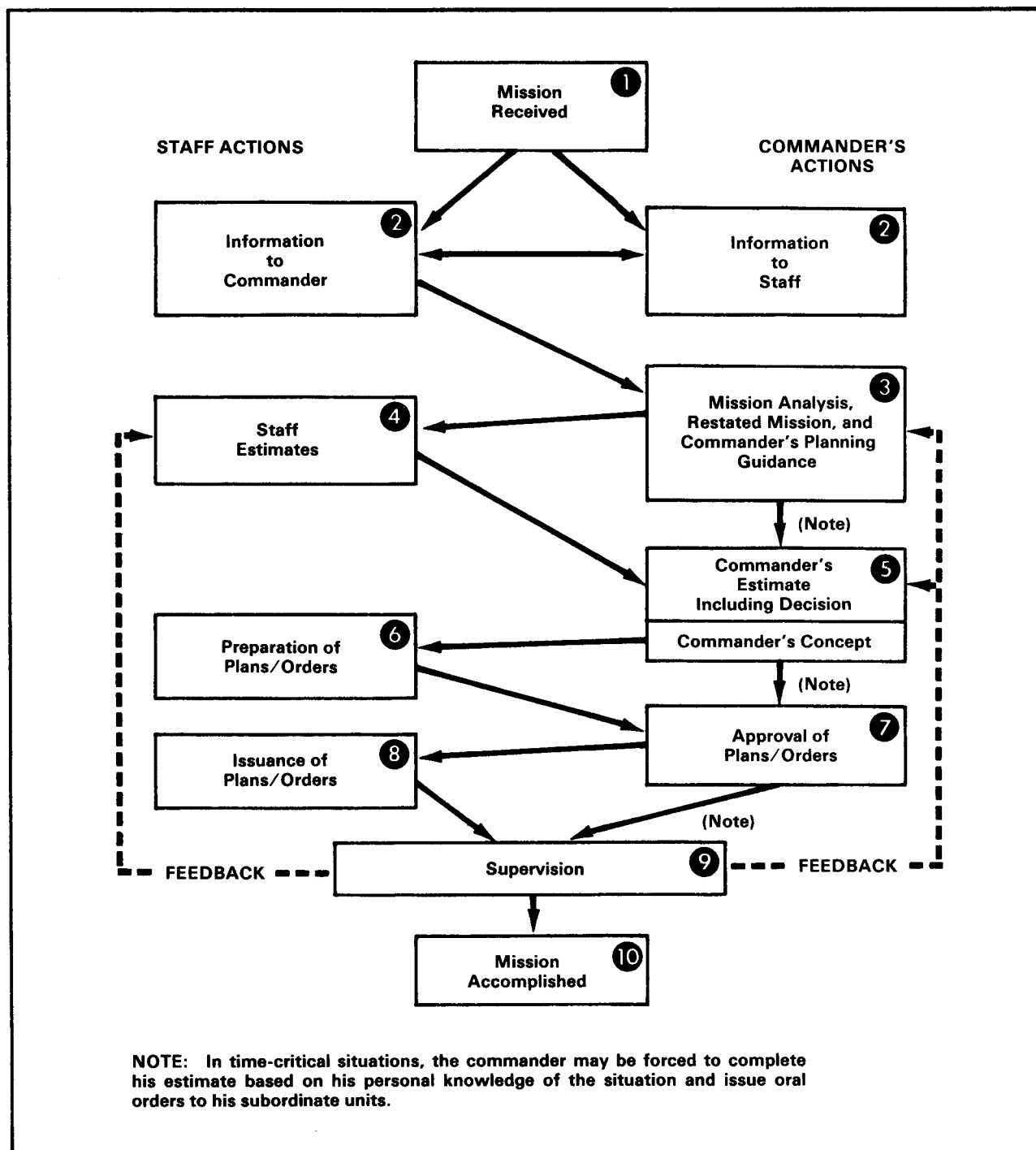


Figure 2-2. Military decision-making process.

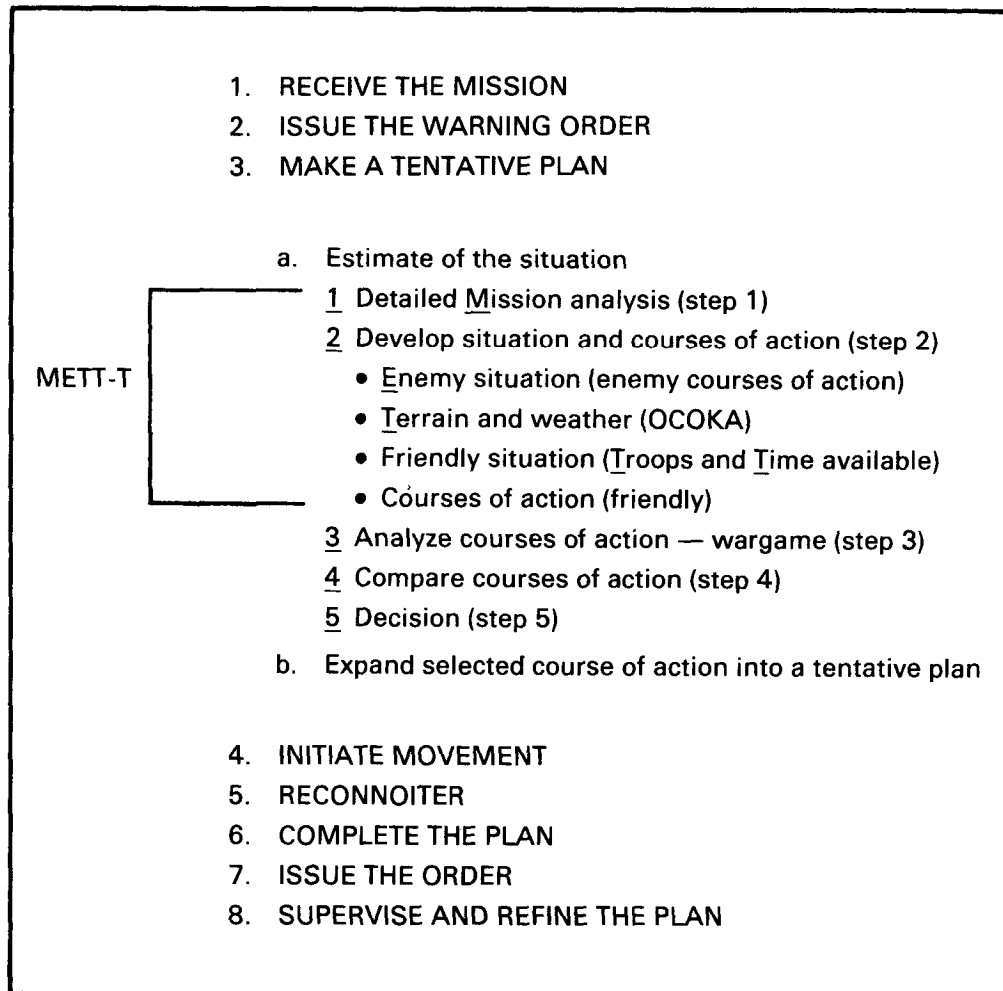


Figure 2-3. METT-T, estimate of the situation, and troop-leading procedures.

- Who is the enemy (unit, size, type)?
- Where is the area of operations (is movement required; when must it start)?
- Attachments and detachments (who, when)?
- Time available (time for further planning, when to issue the warning order, FRAGO, or OPORD)?

- (b) The commander and staff make an informal schedule to ensure that no more than one-third of the available

time is used to prepare and issue the FRAGO or OPORD. The commander makes rapid deductions and issues instructions to his staff, who issue a warning order. The commander should disseminate as much preliminary information as possible to his subordinates so that they may begin their troop-leading procedures. He also determines what critical information he needs from his staff, higher headquarters, and reconnaissance to continue the planning process. The scouts are almost always ordered to move immediately to an area and begin a reconnaissance. Leader reconnaissance begins as soon as feasible and is as detailed as time permits.

- (2) **Issue the warning order.** A warning order is issued immediately on receipt of an order or warning order from brigade. The warning order informs the staff and subordinate commanders what the operation is, when it is scheduled to commence, what preliminary actions are required, and where and when the order will be issued. Detailed discussions of warning orders and examples are in Appendix B.
- (3) **Make a tentative plan.** The task force commander, assisted by the staff, begins his estimate process:
 - (a) **Estimate of the situation.** The estimate of the situation is an integral part of task force decision-making. The estimate of the situation incorporates analysis of the factors of METT-T and analysis of friendly courses of action into a process that allows the commander to select the best course of action as the basis for the task force plan. At the task force level, the estimate is a mental process. (See FM 101-5, Chapter 5, for a full discussion of command and staff estimates of the situation.)

Step 1. Detailed mission analysis. The brigade order is reviewed to determine all specified and implied taskings. The mission-essential tasks are incorporated into the task force commander's restated mission. The commander gives the staff the restated mission and guidance, including the constraints and implied tasks identified during the mission analysis.

Step 2. Develop situation and courses of action. Based on the restated mission and commander's guidance, the staff begins planning for the new operation. The task force staff assists by providing updated staff estimates, or, more likely, by providing

requested facts and recommendations. Critical information provided includes the S2's initial situation template, the combat status of the task force, the availability of support, and recommendations concerning preparations. As early as possible, the task force commander provides his intent, which is his visualization of how the enemy is to be defeated and of the battlefield after the mission is accomplished. The commander's intent is a clear statement of the desired effects of the task force's operation. It must expand on the "why" of the mission statement to explain the "big picture." It is a statement of purpose or intended outcome, rather than guidance about how to conduct the operation. The commander and the S3 then develop tentative courses of action:

- For offensive missions, considerations include subordinate unit objectives, how the task force will move along the avenues of approach, the form of maneuver used against the enemy, designation of the main attack, supporting attack, and reserve forces, as well as other considerations to accomplish the mission.
- For defensive operations, considerations include as a minimum, determining where the enemy will be defeated, positioning of forces along the avenues of approach, either in depth or at critical areas, and designation of counterattack forces and reserves.
- The internal task organization of the task force is considered along with each course of action. Task organization is the primary method the task force commander uses to ensure that companies have the combat power they need to accomplish their assigned missions.

Step 3. Analyze courses of action — wargame.

- One technique to evaluate courses of action is to wargame them against likely enemy courses of action, beginning with the most probable. At task force level, wargaming is a mental process of visualizing each step of the battle, considering task force actions, enemy reactions, and task force counteractions.
- IPB plays an important part in wargaming the courses of action. Through IPB, the commander

and S2 develop a clear picture of the battlefield, the courses of action available to the enemy commander, enemy actions that disclose which course of action the enemy will adopt (indicators), and to establish decision points or lines that are used to specify points during friendly or enemy movement that require task force action. When a decision point is reached, the task force (or supporting assets or individual teams) takes a specified action, such as counterattack, fire a group of targets, or displacing to a supplementary position. The specified actions are taken either automatically or on order as directed by the OPOD. Wargaming often involves the entire staff in planning the use of combat support assets, to include establishing priorities, command and support relationships, assigning targets, and fixing responsibilities.

Step 4. Compare courses of action. The analysis of the courses of action identifies advantages and disadvantages of each. These are compared by the commander and staff. If time and situation permit, each staff officer briefs his area of responsibility concerning each course of action. If this is not possible, the commander must rapidly consider all available information. Based on the staff recommendations and his own knowledge and experience, the commander decides on a course of action and expands the selected course of action into the concept of the operation.

Step 5. Decision. Based on the comparison of courses of action, the task force commander chooses or modifies one and gives his decision to the staff in the form of a concept of operation. Necessary orders are issued, and the S3 or XO supervises compilation of the complete plan or order. The commander and S3 then initiate movement as necessary and conduct a reconnaissance to obtain information to finalize the plan.

- (4) **Initiate movement.** Based on the tentative plan, movement of the elements of the task force or preparations begin. Some movement or preparation, especially scout reconnaissance, may have been directed immediately on receipt of the warning order. Additional warning orders, FRAGOs, or movement instructions are issued as the plan is developed.

(5) **Reconnoiter.**

- (a) Task force leaders routinely reconnoiter the terrain. The reconnaissance is as extensive and detailed as possible. The task force commander may assign certain reconnaissance tasks to each of his subordinates. Normally, each company team commander is assigned his tentative areas of responsibility; however, they may also be assigned to reconnoiter other areas, such as the flanks, rear, or routes. Leaders and the staff reassemble at a prearranged time and location to report on their efforts. The information gathered by the leaders as well as information from other sources (for example, scouts and patrols) is used to complete the plan.
- (b) One technique to expedite the reconnaissance effort and planning is to establish orders groups, who assemble on order of the commander. For example:
 - Orders Group **Alpha** (for hasty planning or reconnaissance): task force commander, XO, S3, S2, FSO.
 - Orders Group **Bravo** (for detailed planning): Orders Group Alpha, S1, S4, FAC, engineer, air defense officer, scout platoon leader, mortar platoon leader, GSR section leader, BMO, CSM, CESO, S3 Air, chemical officer, Company E commander.
 - Orders Group **Charlie** (for hasty reconnaissance or hasty issuance of orders): Orders Group Alpha, company and team commanders and FSOs, scout platoon leader.
 - Orders Group **Delta** (for detailed issuance of orders): All orders groups, LOs.

(6) **Complete the plan.**

- (a) Using the latest reconnaissance and intelligence information, the commander's concept of the operation is finalized, details are added, and the order is prepared. Actions are taken to compensate for any disadvantage associated with the chosen course of action and contingency plans are fully developed. The final task organization, plans for fire control, CSS, security, surveillance, communication, additional command and control measures, and lateral or flank coordination are refined and incorporated into an OPORD. Requirements for additional support are determined and requested from higher headquarters. Coordination with adjacent, supporting, and higher headquarters is made.

- (b) An order consisting of at least an overlay with graphics and an execution matrix may be used in fast-moving situations. The one-third — two-thirds rule should be adhered to, whereby the higher echelon headquarters only uses one-third of the planning time available, including the time it takes to issue the order.

(7) Issue the order.

- (a) If possible, the order is issued from a vantage point overlooking the terrain on which the operation will be conducted. If not possible, the commander should use any aids he can to assist personnel to visualize the terrain such as a sketch or a sand table.
- (b) One technique is to require subordinates to backbrief the commander on their units' role to ensure they understand their instructions and the commander's intent. This can be done following the orders briefing, or, preferably, at some later time before the subordinate commander's operation order. Ideally, backbriefs are conducted while overlooking the terrain with all commanders, FSOs, and key staff present.

(8) Supervise and refine the plan.

- (a) The commander and his staff supervise the preparations for the operation. These preparations include coordination, reorganization, fire support, engineer activities, maintenance, resupply, and movement. Any departure from the plan, both before and during the operation, is coordinated with the task force commander. As subordinate commanders develop their plans and begin detailed preparations and reconnaissance, minor changes may be necessary to implement the commander's intent. For example, if the commander responsible for a planned obstacle determines that he cannot cover it with fire, he has it emplaced where it can be covered by fire and best support his plan. This changed location must be coordinated with the FSO and the main CP.
- (b) Rehearsals are conducted to reinforce both the scheme of maneuver and the fire plan. Whenever possible, rehearsals are conducted under limited visibility or NBC conditions and over similar terrain. Key staff and subordinate commanders participate in rehearsals to identify problem areas and contingency actions, determine movement and reaction times, enhance

coordination, and refine the plan. Ideally, rehearsals and briefbacks identify key events and critical tasks which subordinates must address to the commander's satisfaction.

- (c) Whenever a significant change in the factors of METT-T occurs, the main CP must ensure that the task force commander, staff, and subordinate unit commanders are notified. Before the start time of the operation, the S2 should update any changes to the known enemy situation.
- (d) Lateral communications between company team commanders, the scouts, and the task force commander are critical to command and control. Company commanders must talk to each other during the battle. Each commander must tell the commanders on his flank or to his rear what he is planning to do, and make appropriate recommendations to other company team commanders and to the task force commander.
- (e) Refinement of the plan is a continual process that does not stop at the beginning of the operation. Throughout the fight, the commander concentrates on monitoring the progress of the battle, but he does not hesitate to adjust or modify his original plan when the development of the battle or a significant change in the factors of METT-T requires it.

Section IV. INTELLIGENCE PREPARATION OF THE BATTLEFIELD

Intelligence preparation of the battlefield is an integral part of the battalion command and control process. It is the primary factor that will allow the battalion to react quicker than the enemy. The S2 is responsible for collecting, analyzing, and reporting information concerning weather, enemy, and terrain. The analyzed information is then disseminated as intelligence. IPB is continuous, and it provides a basis for all intelligence operations, tactical decisions, and tactical operations. The staff uses IPB information in developing the operation plan, the collection plan, and the reconnaissance and surveillance plan. This section provides information on how the battalion S2 conducts IPB and then applies it to the development of the tactical plan.

2-12. PURPOSE

- a. IPB is the continuous process of analyzing the weather, enemy, and terrain for a specific battlefield area for all tactical operations. It integrates threat doctrine with the terrain and weather to determine and evaluate enemy capabilities, vulnerabilities, and probable courses of action.
- b. The task force S2 relies on higher headquarters to provide much terrain and weather information. The formal IPB process is performed at corps and division and the informal IPB process is performed at brigade/battalion levels.

2-13. FUNCTIONS OF THE IPB PROCESS

The functions of the IPB process are battlefield area evaluation, terrain analysis, weather analysis, threat evaluation, and threat integration.

a. Function 1 — Battlefield Area Evaluation.

- (1) During Function 1 of IPB, the scope is narrowed to the battalion task force present and future area of operations and interest. The commander and S2 view each of these areas in four dimensions: width, depth, height, and time.
- (2) After the specific areas have been defined, the S2 assembles the information and materials required to continue the IPB process. Normal climatic, weather, and area studies also should be acquired from the G2. Map requirements include complete coverage of areas of operations and areas of interest. Standard military topographic maps are used.

b. Function 2 — Terrain Analysis.

- (1) Function 2 of the IPB process, terrain analysis, identifies the effects of terrain on combat operations and is performed concurrently with Function 3, weather analysis.
- (2) The S2 relies on higher headquarters to provide terrain factor overlays and other detailed terrain products to perform IPB. In the absence of such overlays, he conducts the analysis with assistance from the task force engineer. Listed below are terrain factor overlays normally available to the battalion task force.
 - Vegetation.
 - Surface materials (soils).

- Surface drainage.
 - Slope.
 - Obstacles.
 - Transportation (roads and bridges).
 - Cross-country movement (wet and dry).
 - Concealment (summer and winter).
 - Groundwater (planning data base only).
- (3) Terrain is analyzed using the five military aspects of terrain (OCOKA) detailed below.
- (a) Observation and fields of fire. Observation is the ability to see over a particular area. Fields of fire refer to the area a weapon can cover effectively from a given point.
 - (b) Cover and concealment. Cover is protection from the effects of fire, concealment is protection from observation.
 - (c) Obstacles. Obstacles are existing or reinforcing features that stop, impede, or divert movement.
 - (d) Key terrain. Key terrain is any feature or area whose seizure or control offers a major tactical advantage.
 - (e) Avenues of approach. Avenues of approach are routes by which a friendly or enemy force may reach an objective or key terrain feature. The S2 should consider both ground and air avenues of approach. Mounted and dismounted avenues of approach include mobility corridors. Mobility corridors are areas within the avenues of approach that permit movement and maneuver. An avenue of approach is broad enough to contain sufficient mobility corridors to support rapid movement and maneuver of forces along its course. Avenues of approach are readily identified when NO-GO and SLOW-GO terrain has been depicted on a combined obstacle overlay. Once identified, avenues of approach should be analyzed (using OCOKA, ease of movement, and maneuver room) and then compared from both friendly and enemy perspectives. This comparison will help in identifying key and decisive terrain.

c. Function 3 — Weather Analysis.

- (1) Weather is critical to battalion tactical operations. Reliance on mobility requirements for ground operations may be

affected significantly by prevailing weather conditions. The five military aspects of the weather that concern intelligence support to operation planning are: temperature and humidity, precipitation, winds, clouds, and visibility.

- (2) The S2 relies heavily on the staff weather officer and weather team at division to provide specific weather subfactor information including —
 - Ground fog.
 - Severe weather.
 - Cloud-free line-of-sight (CLOS).
 - Terrain influenced wind direction (TIWD).
 - Snow depth.
 - Ice thickness.
- (3) The S2 then integrates weather data with terrain data. The S2 combines his own hasty analysis with available intelligence products, such as short- and long-range forecasts, light data tables, and climatic summaries when analyzing terrain.

d. Function 4 — Threat Evaluation.

- (1) The S2's IPB threat evaluation consists of a study of available enemy order of battle (OB) factors. These include —
 - Unit identification.
 - Composition.
 - Disposition.
 - Strength.
 - Training.
 - Tactics.
 - Logistics.
 - Combat effectiveness.
- (2) When such detailed OB data is not available, the primary threat evaluation tool is a generic doctrinal template (see Figure 2-4, page 2-26). A doctrinal template depicts the enemy doctrinal deployment for various types of operation without the constraints imposed by weather and terrain. Specifically, composition, formation, frontages, and depths are displayed.
- (3) During threat evaluation, the S2 identifies high value targets.

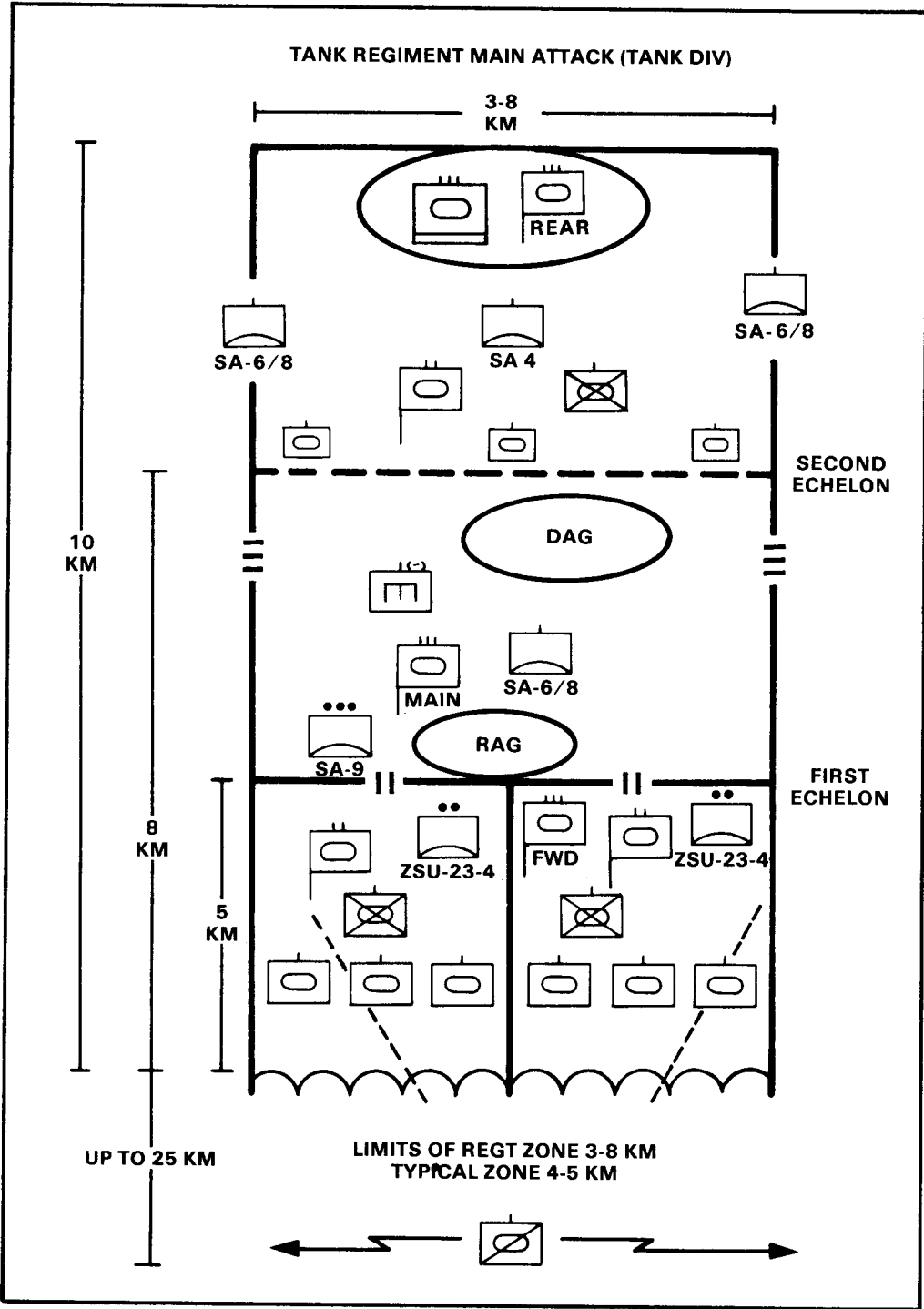


Figure 2-4. Doctrinal template.

e. Function 5 — Threat Integration.

- (1) The battalion S2 relates his threat evaluation to the terrain and weather to predict how the enemy will plan his maneuver in the area of operations. Threat integration is accomplished in the development of situation, event, and decision support templates.
- (2) The situation template is a doctrinal template with terrain and weather constraints applied. The S2 uses common tactical sense and known information to adjust the templates to specific terrain. He develops and templates the most probable course of action and other courses of action as time permits.
- (3) The battalion S2 uses event templating for the identification and analysis of significant battlefield events and enemy activities that provide indicators of the enemy course of action (see Figure 2-4). It is a projection of what will most likely occur if the enemy adopts a particular course of action. By knowing what the enemy can do and comparing it with what he is doing, we may be able to predict what he will do next. As the enemy force is visualized moving along a mobility corridor, critical areas become apparent. These areas are significant because within them, significant events and activities will occur. It is within these areas that targets will appear. These areas are designated as NAI. An NAI is a point or area along a mobility corridor where enemy activity or lack of activity will confirm or deny a particular enemy course of action. NAIs facilitate intelligence collection, reconnaissance and surveillance, and analysis, because attention is focused on areas where the enemy force must appear if it has selected a particular course of action.
- (4) Event templating enables the S2 to develop precise collection requirements, maximizing the effectiveness of limited resources over extended areas against a vast array of enemy targets. It provides answers to the questions where to look, when to look, and what to look for. The situation template and event template enable the S2 to establish collection priorities based on those courses of action the enemy is most likely to adopt. At the task force level, these two templates may be combined.
- (5) The decision support template is the final template of IPB. It does not dictate decisions to the commander, but rather identifies critical events and threat activities relative to time and location which may require tactical decisions. Critical events and threat activities are displayed on the decision

support template using target areas of interest, decision points, and time lines (Figure 2-5).

- (a) A TAI is an area or point usually along a mobility corridor, or is an engagement area (EA) where the interdiction of threat forces by maneuver, fires, and/or jamming will deprive or reduce a particular threat capability.
- (b) A decision point (DP) is a point or area at which a commander must make a decision to engage threat forces. Usually a DP is associated with each TAI. The S2 must recommend DPs in conjunction with the S3.

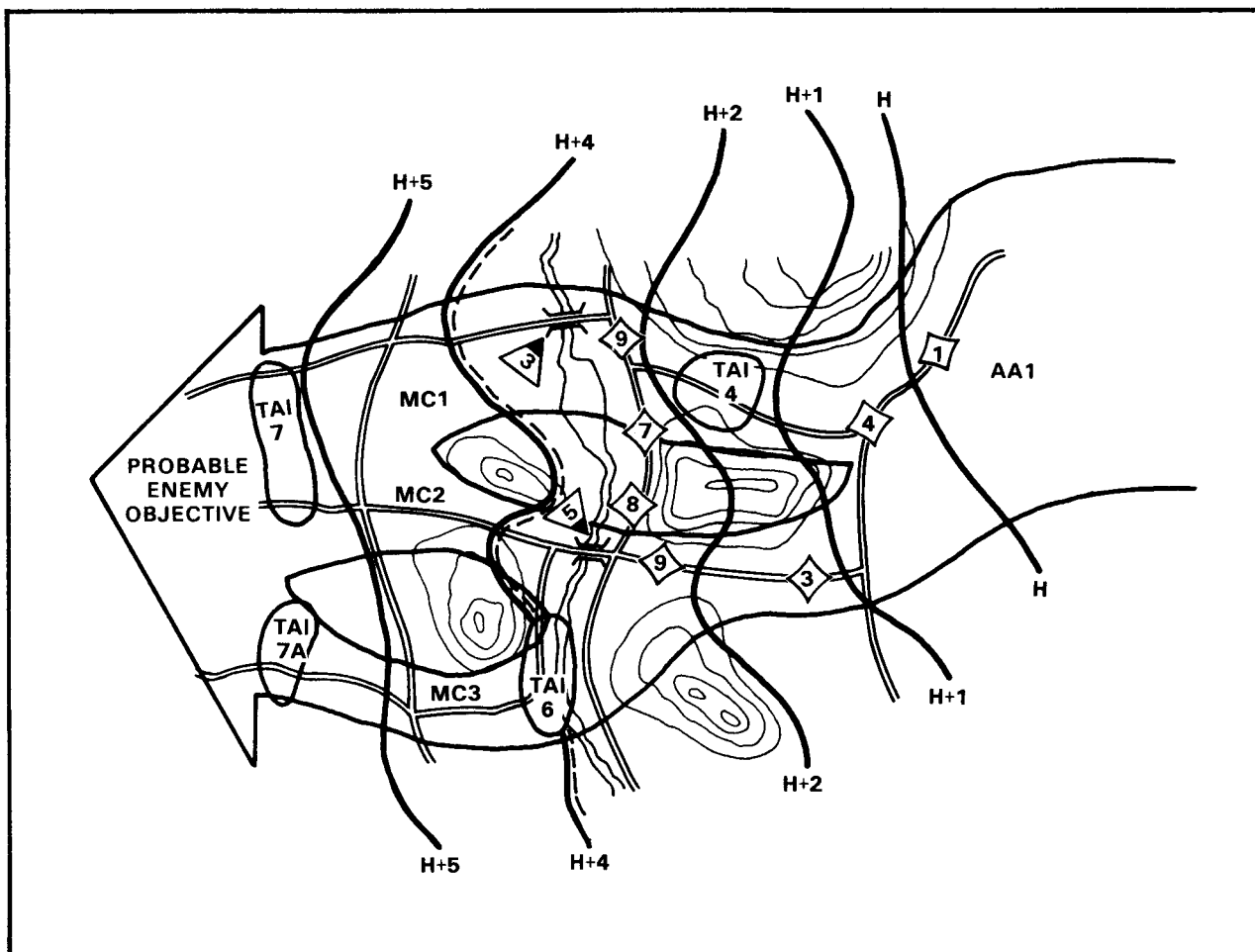


Figure 2-5. Decision support template.

- (c) Time lines are used to depict the maximum extent of enemy advance/withdrawal within a given time. They are adjusted to reflect actual movements. They assist the S2 in verifying movement rates or in adjusting DPs accordingly.
- (6) IPB provides a tool for the systematic analysis of the enemy, weather, and terrain to determine enemy capabilities, vulnerabilities, and probable courses of action in a specific geographic area. IPB is an ongoing process, which involves both the S2 and S3. Properly conducted during the planning and preparation phase, informal IPB helps the task force commander and staff develop courses of action in the manner most likely to produce success and maintain flexibility and freedom of action. During tactical operations, the S2 uses the IPB process to obtain, analyze, and distribute intelligence to maneuver elements. The S2 must sift and analyze volumes of intelligence information and provide the commander his assessment of a most likely course of action.

Section V. COMMAND AND CONTROL COMMUNICATIONS

The commander must understand the capabilities, limitations, and vulnerabilities of his communications system. He should —

- Provide for redundant means of communication.
- Minimize use of the radio by using face-to-face coordination, wire, and messengers when possible.

2-14. COMMUNICATIONS-ELECTRONICS RESPONSIBILITIES

- a. All levels of command must gain and maintain communications with the appropriate headquarters and personnel. The traditional coordination and communications responsibilities are senior to subordinate, supporting to supported, reinforcing to reinforced, from left to right, and from rear to front.
- b. Regardless of the responsibility, all units take prompt action to restore lost communications.
- c. The signal officer establishes communications relays according to the task force commander's directives.

2-15. RADIO NETS

- a. Battalion task force communications are sent over a variety of radio nets. Primary battalion communications nets are —
 - (1) **Command net.** A secure command net is used for command and control of the task force. All organic and attached units, including the FSO, FAC, and leaders of supporting elements, enter the task force command net. During the execution of the mission, only commanders transmit; all others monitor and transmit only essential information. The command net is controlled by the task force main CP.
 - (2) **Operation and intelligence (O&I) net.** The O&I net is a secure net established to provide a mechanism for the battalion task force to accept routine items of information concerning operations and intelligence reporting without cluttering or interfering with the battalion command net.
 - (3) **Administrative/logistics net.** The A/L net is a tactical net, controlled by the combat trains CP, used to communicate the administrative and logistical requirements of the task force. All organic and attached units normally operate in this net.
 - (4) **Special radio nets.**
 - (a) The scout platoon net or a designated frequency may function as a surveillance net when required. The S2 and elements assigned surveillance missions operate on this net. Other elements enter or leave the net to pass information as required.
 - (b) The task force FSE and company fire support teams (FISTS) operate in the supporting field artillery command fire direction net and a designated fire direction net to coordinate field artillery fires for the battalion. The TACP operates in US Air Force tactical air-request and air-ground nets to control air strikes.
 - (c) Supporting air defense units monitor the early warning net. In the absence of collocated air defense support, the main CP will also monitor the division early warning net.
 - (d) Attached or OPCON support assets may operate in their parent unit nets, but they must also monitor the command net at all times.
- b. Figure 2-6 illustrates the primary task force FM nets and stations that operate in each net.

	TF CMD	TF O&I	TF A/L	OTHER
CDR	P	-	E	P - BDE CMD
XO	P	-	P	
S3	P	M	-	M - BDE CMD
MAIN CP (S3)	NCS	-	M	P - BDE CMD
MAIN CP (S2)	M	NCS	-	P - BDE O&I
COMBAT TRAINS CP	M	-	NCS	P - BDE A/L
SIGNAL OFFICER	M	E	M	E - AS REQUIRED
FSO	M	-	-	M - TF FD, FS NETs
FAC	M	E	-	P - AIR FORCE NETs
S1	-	-	M	
S4	M	-	P	E - AS REQUIRED
BMO	-	-	P	
SPT PLT	M	-	P	
MED PLT	-	-	P	
CO/TM CDRs	P	E	-	P - CO/TM CMD
CO/TM XOs	M	-	E	P - CO/TM CMD
CO/TM 1SG	-	-	P	P - CO/TM CMD
ENGR PLT	M	E	E	P - ENGR PLT
SCOUT PLT	P	P	E	P - SCOUT PLT
ADA PLT	M	E	E	P - ADA PLT; EW
MORTAR PLT	M	-	E	NCSS - TF FD NET
GSR	M	P	E	
HHC CDR	-	-	P	P - BDE A/L
LO	M	E	-	M - AS ASSIGNED

NCS - NET CONTROL STATION FOR NET

P - PRIMARY USERS - MONITOR AND TRANSMIT

M - MONITOR NET, TRANSMIT AS REQUIRED

E - ENTER NET TO TRANSMIT MESSAGE, THEN RETURN TO PRIMARY NET

Figure 2-6. Task force FM nets/stations matrix.

2-16. EAVESDROP SYSTEM

Eavesdrop is a technique used on all nets from task force command down to platoon nets.

- a. This technique requires all stations to monitor and use message traffic on a given net, even if they are not the direct recipients

of the message. For example, command net traffic is sent from a company team commander to the task force commander or S3 at the tactical CP. The other company team commanders and main CP monitor this traffic, update situation maps, and take appropriate action. In this way, all stations will have an understanding of the situation without requiring the same information to be transmitted by the NCS.

- b. Additionally, operations may require continuous monitoring of a subordinate or adjacent unit net. In this case, the main CP eavesdrops on the selected net and ensures information critical to task force operations is retransmitted over the appropriate battalion nets.

2-17. MOBILE SUBSCRIBER EQUIPMENT

MSE terminals with tactical facsimile (TACFAX) connectors are located at the main CP and the combat trains CP. They provide a rapid, secure means of transmitting and receiving OPODs and lengthy CSS reports between the task force and brigade. Any MSE terminal provides access to the entire corps network.

2-18. COMMUNICATIONS SECURITY AND ANTIJAMMING

- a. Communications security denies or delays unauthorized persons from gaining communications information. Techniques include —
 - Using authentication procedures.
 - Changing frequencies and call signs.
 - Restricting use of radio transmitters.
 - Using wire or messenger.
 - Reducing transmission time.
 - Frequent authentication.
- b. Antijamming procedures used by radio operators include —
 - Use of low power.
 - Antenna masking and directional antennas.
 - Continued operation and reporting.
 - Surreptitiously switching frequencies.

Section VI. OTHER COMMAND AND CONTROL PROCEDURES

This section describes additional procedures which enhance command and control.

2-19. OPERATIONS SECURITY

OPSEC denies the enemy information about planned, ongoing, and after-operation activity until it is too late for enemy forces to react effectively. OPSEC must be maintained throughout all phases of an operation. It is an integral part of planning, unit training, and combat operations at all levels of command.

- a. The S3 has primary staff responsibility for OPSEC within the task force. He is assisted by the S2, who provides information on the enemy's collection capabilities.
- b. There are three types of OPSEC protective measures: countersurveillance, countermeasures, and deception.
 - (1) Countersurveillance includes all measures (ground, air, or electronic) taken to protect the status of friendly activities and operations, such as those measures taken to defeat enemy reconnaissance. Countersurveillance of enemy air is accomplished primarily through camouflage, cover, and concealment and by use of air defense assets. Countering enemy ground reconnaissance is accomplished through active and aggressive counterreconnaissance measures.
 - (2) Countermeasures are actions taken to eliminate or reduce the intelligence and electronic warfare threat. These actions may be anything from deception to destruction of the enemy collection capability. Countermeasures include —
 - Vehicle camouflage.
 - Light and noise discipline.
 - Challenge and password.
 - (3) Tactical deception includes those measures taken to create a false picture of friendly activities and operations. The deception must be believable and must make the enemy do something or not do something that supports the commander's concept. Deception helps to establish the conditions for surprise. Maneuver plans that avoid obvious patterns or solutions can be integrated with deception to achieve surprise.

- (a) Deception operations may include –
 - Feints and ruses.
 - Demonstrations.
 - Dummy equipment and positions.
 - Falsification of material placed where it can be captured or photographed by the enemy.
 - Manipulation of electronic signals.
- (b) Most deception operations are planned and directed at levels above battalion. Means of deception at battalion are —
 - Visual — showing movement, equipment, and activity at a believable time in a believable place. This can be actual or dummy.
 - Sound — engines running, track noise, hatch closing, digging, and gunfire.
 - Odor — diesel fumes and cooking odors.
 - Electronics — false transmission, remote locations for radios, and radar scan of areas other than those of primary interest.
 - Thermal — false heat sources.
- (c) Deception techniques can be combined in various ways. For example, a small force can simulate a larger one by making the noises of a larger force; having some actual and some dummy positions; raising dust clouds by having vehicles dragging chains or tree branches; moving a force across an observable area, then returning it under cover and presenting it again and again; creating extra radio stations to simulate traffic of a larger unit; and in many other ways. The commander must think of security (all types) and deception as combat multipliers. Military intelligence support can often assist in these activities. (See FM 90-2.)

2-20. FIRE CONTROL

Control of battalion task force fires is critical to the effective employment and massing of available fire support. Fire control is used with maneuver to bring the maximum available direct and indirect fires on the enemy's positions or formation while avoiding the mistaken engagement of friendly forces (fratricide). A normal

part of a company team's mission is telling it where, when, and what to engage by direct and indirect fire.

Fires should be distributed to completely cover the enemy. Ideally, each weapon should fire at a different target or part of the enemy. With the lethality of modern weapons, multiple engagements of the same enemy target waste ammunition and lessen the ability to quickly destroy the enemy.

Fire control measures are used to distribute fires, designate targets, and protect friendly forces. Fire control measures normally used by the battalion task force are —

- Sectors of fire.
- TRPs and EAs.
- Restrictive the control measures.
- Priorities of engagement.
- Pyrotechnics and visual markers.
- Checkpoints and trigger points.