

CHAPTER 3

COMMAND AND CONTROL

Command and Control
by MAJ Rex Davis, Company Team Trainer,
MAJ David Harper, Training Analyst,
MAJ William Roka, Deputy Team Chief O/C, and
CPT David Sizemore, Doctrine Writer
U.S. Army Armor Center

1. GENERAL.

Command and control is arguably the most essential element of the art and science of warfare, yet there is no single doctrinal manual devoted to the topic. There is probably a valid reason for that - no other subject covers such a broad spectrum and is so integral to everything the Army does. **FM 101-5, Staff Organization and Operations**, states that the focus of command and control is the commander while "the object of command and control is forces." It sounds simple enough. History proves time and again that it is not, especially during hours of limited visibility.

1st platoon, Alpha Company began to take devastating direct fire from a two-story building in an isolated rural village. The village was surrounded on all sides by densely wooded terrain; the enemy was able to move freely inside and outside of the village because the battalion had failed to isolate the objective area. The battalion's mission was to clear the village of insurgent forces and stabilize it for handover to the host nation government. The night fight had been raging inside the village for over three hours with an American battalion pitted against a well-organized company-size guerilla force, when 1st platoon, Alpha, began to receive fire from the two-story building. The building had not been marked as cleared, and 1st platoon began to fire and maneuver toward the enemy located on the second floor. The fight within the village lasted another hour and a half as 1st platoon, supported by second platoon, engaged the enemy machine gun on the second floor. Casualties mounted as both platoons tried unsuccessfully to maneuver to a position where they could gain entry and clear the building. Eventually, 2nd platoon, supported by the one squad left in 1st platoon, was able to get two squads into the building. A firefight ensued that left most of those two squads either KIA or WIA, but the enemy element was finally effectively destroyed. The problem was that the enemy element was 3rd platoon, Alpha Company. The company had lost control of its maneuvering platoons and the enemy had withdrawn from the village an hour and a half earlier. The battalion had failed to isolate the objective, and the companies had not properly rehearsed clearing and marking buildings. 3rd platoon had cleared the building hours earlier, had not marked it, and then began to engage what they thought was an enemy platoon. The ensuing casualty intensive firefight was a loss of positive control and situational awareness at all levels of command within the battalion. An impossible scenario? Not really.

This is a modified version of scenarios that have taken place in JRTC's Shugart-Gordon on more than one occasion. A trip to the library can provide similar historical examples in urban fighting that occurred in numerous engagements in the towns and rural villages of Europe in World War II.

The urban environment provides a unique challenge as the commander attempts to array, maneuver, and control his forces. Regardless of the commander's view of urban combat as a distinct type of operation or as a unique set of conditions, urban operations require the commander and staff at all levels to expand their thought processes during mission analysis. MOUT thinking needs to go beyond simple attempts to classify it as an operation or a condition. In theory, it may be one or the other. In actuality, it is both. Offensive, urban combat requires application of the fundamentals of the offense just like any other deliberate attack, and it requires detailed intelligence preparation of the battlefield (IPB) just like any other unique condition. But the total expanse of the urban environment covers a variety of tactical and non-tactical considerations that are difficult to grasp.

Urban combat missions require IPB that goes beyond simply evaluating terrain that happens to have buildings on it. Urban operations mission analysis has to consider the political and psychological implications of both enemy and friendly actions. It has to consider civil affairs, civilians on the battlefield (COBs), and collateral damage control. It has to consider threat analysis that may reveal a wide range of enemy activity including paramilitary forces and terrorists. The question still remains how the commander and staff will control their forces once they enter urban areas.

2. DOCTRINAL BASE.

The most extensive doctrinal discussion on command and control appears in FM 101-5 on pages 1-1 through 1-3. It clearly defines the distinct characteristics of command and control as two seemingly separate entities, but states that in practice they are unified. *The commander cannot command effectively without control, and he, with or without the staff, cannot exercise control without command.*

The three primary aspects of command--**authority, responsibility, and accountability**--are critical, and the focus of urban combat command and control (C2) is the commander. This chapter will highlight those items in an offensive urban combat environment that will help the commander control the object of C2: his forces. **FM 90-10-1, *An Infantryman's Guide to Combat in Built-Up Areas***, provides a minimal discussion on C2 considerations in urban combat, but it does state that offensive urban combat planning is centralized and execution is decentralized. Decentralized execution is precisely why the staff must develop a detailed and synchronized plan that will meet the commander's intent and provide subordinate units with the means to accomplish the mission.

3. PLANNING.

OBSERVATION 1: During the urban combat mission analysis, battle staffs sometime focus on generically filling out the selected wargaming tool (synchronization matrix) as opposed to conducting a detailed wargame that focuses on the wargaming methodology (box technique) and the desired outcome.

DISCUSSION 1: *The brigade commander originally directed the brigade staff to develop two distinct courses of action (COAs) for the urban combat mission. It was not quite clear as to why the brigade staff chose to disregard that guidance, but they only developed one COA. At the end of the mission analysis briefing, the brigade commander directed the staff to wargame the single COA they had developed by utilizing the box technique. Instead of conducting the wargame according to the box technique outlined in FM 101-5, the staff conducted the wargame according to the sequential phases that they had developed for the single COA. The staff did not address actions on the objective. The staff used a wargaming process that was driven by a synchronization matrix similar to the one contained on pages 5-20 and 5-21 of FM 101-5. The staff became more focused on completing the wargaming tool as opposed to actually wargaming the course of action. The wargame never developed a tempo that facilitated visualizing the enemy, the battlefield, and friendly forces' actions. Although the brigade S-2 presented the enemy's reactions to the BLUEFOR's actions, the wargaming process followed a slow, tedious, lock-step routine that allowed every primary and special staff member to state what actions his section or element would be taking at that particular time. The wargame quickly lost focus on what the brigade commander had directed - a wargame that focused on the critical aspects of the operation by using the box method.*

TTP:

- Pay particular attention to the commander's initial planning guidance. If time permits, develop multiple courses of action in accordance with the doctrinal process outlined in FM 101-5.
- The S-2 and S-3, along with those other staff members who represent "killer" systems, conduct the wargame, while medical, logistician, communications, and other supporting staff members listen. Next, integrate combat support and combat service support assets into the fight. As with any technique, consider the pitfalls. Do not allow the "killers" to develop an action in support of the overall COA that is not supportable. That is why it is imperative that all staff members actively participate in the wargame, though not necessarily in a round-robin fashion where every primary and special staff member feels obligated to address something at every action, reaction, counteraction point during the wargame.
- Develop a script to guide the wargame. Develop a standard list of questions that must be answered to derive the desired details for the plan. Too often during the wargaming process, staffs get lost in generic statements such as "artillery continues to provide counterfire during this phase" or "maneuver elements will continue to move along Route Texas." A script with standard questions that must be addressed is a viable TTP to prevent "generic" wargaming.

OBSERVATION 2: During urban combat mission analysis, staffs sometime fail to develop a plan that is focused on the enemy as opposed to buildings in the built-up area. In other words, the plan is terrain-oriented (buildings) as opposed to enemy-oriented. The S-2 often fails to play the uncooperative and free-thinking enemy, frequently bending to the will of the S-3 or XO to fight the battle in the way they want.

DISCUSSION 2: *During the orders process, S-2s at both the brigade and battalion level had a fairly accurate picture of the enemy template in the built-up area. However, during the wargaming sessions, little to no emphasis was given to developing*

a detailed scheme of maneuver that focused on the enemy and would thus facilitate control of forces. The plan was geared more towards sequential building clearing. The S-2 seldom looked at the fight from the enemy side. This "fight" then gives the commanders and staff the false impression that everything will go the way they want it to go. This leads to the battalion producing a de-synchronization matrix as opposed to what they started out to do which is synchronization the operation.

TTP:

- For a deliberate attack, develop a detailed plan for fire and maneuver consistent with doctrine.
- Focus the scheme of maneuver to attack the enemy.
- Determine the enemy's location and develop a plan that defeats his direct and indirect fire systems.
- Focus the direction of attack on the enemy's weakness. This becomes the point of entry. Isolate the objective area and establish a foothold at the point of entry. Use the foothold to fire and maneuver from.
- Sequentially number buildings from the point of entry. Develop the scheme of maneuver from this numbering system.
- The brigade and battalion maneuver plans directly affect the company scheme of maneuver. Every company within the brigade must know what enemy targets will be engaged by brigade and battalion assets to develop the company scheme of maneuver.

An infantry battalion receives the mission to attack a small village consisting of 20 buildings. The staff develops an objective sketch and sequentially numbers each building from the point of entry. The lead company is tasked to clear and secure buildings 1, 2, and 3. In building 3, the S2 templates a heavy machine gun that has direct line of sight and sectors of fire covering both buildings 1 and 2. The lead company's objective area consists of three buildings; however, the company must first suppress or destroy the enemy machine gun in building 3. The company commander develops a scheme of maneuver to clear building 3 first, followed by buildings 1 and 2. Later, the commander learns that the brigade plan calls for an attack aviation platoon to suppress building 3. The company commander consequently changes his maneuver plan at the expense of lost preparation time.

OBSERVATION 3: Brigade and battalion staffs need to develop the components of Commander's Critical Information Requirements (CCIR) to facilitate the commander's ability to make decisions that impact the plan during urban combat.

DISCUSSION 3: FM 101-5 and **FM 101-5-1, *Operational Terms and Graphics***, provide the doctrinal definitions for the three components of CCIR--priority intelligence requirements (PIR), essential elements of friendly information (EEFI), and friendly forces information requirements (FFIR). PIR are simply those intelligence requirements for which the commander has a stated priority. EEFI is defined as "the critical aspects of a friendly operation that, if known by the enemy, would subsequently compromise, lead to failure, or limit success of the operation, and therefore must be protected from enemy detection." A logical deduction is that EEFI should address the enemy commander's PIR. FFIR is defined as "information the commander and staff need about the forces available for the operation." A logical deduction is that FFIR should be items that cause the commander to make decisions that impact the plan.

TTP: An easier format for use in a battle book or "smart book" to summarize the discussion points above would be as follows:

- **PIR** = what the commander wants to know about the enemy and his plan.
- **EEFI** = what the enemy commander wants to know about us to negatively affect our effort. We need to protect that information.
- **FFIR** = critical information on forces and assets that may affect the ability to accomplish the mission in a negative or positive manner. It is information that will cause the commander to make a decision that impacts the plan.

The following are some examples of PIR, EEFI, and FFIR that do not necessarily help the commander in an urban combat scenario because they do not fit the criteria and logic discussed above:

PIR

- How many noncombatants are in the town? (not useful unless we know where they are, etc).
- How many platoons does the commander have? (not useful unless we know how they are arrayed).
- Where is the counterattack force? (not useful unless we know how it will be employed).

EEFI

- Location of assembly areas (the enemy is more interested in our movement method/route).
- Attack time (the enemy is more interested in exactly where we are coming from, than when).
- Compromise of LZs (that is an FFIR, not an EEFI).

FFIR

- Loss of artillery pieces (does not cause the commander to make a decision/change the plan).
- Loss of Q36 (does not cause the commander to make a decision/change the plan).
- Loss of MICLIC (does not change the plan/ an alternative breach plan/equipment).

Conversely, below are some possible examples of PIR, EEFI, and FFIR that would be more likely to help the commander in an urban environment:

PIR

- Will the commander use noncombatants as protection and how?
- How much force does the commander have inside and outside the town?
- What will cause the commander to commit his counterattack force and how long will that force take to get there?
- How will the commander reinforce weakened positions that BLUFOR is about to exploit.

EEFI

- Method of movement toward the objective (air, truck, or foot infiltration).
- Breach point location.
- Number of companies or battalions the commander plans to send into the village.
- Will all heavy forces be up front at the breach or will there be a heavy team reserve and where?
- Location of assault positions.
- Attack aviation FARP, air attack routes, and battle positions.
- During the attack, will the enemy withdraw to keep a tactical advantage?
- If the enemy is forced out of the city, where will he go and how can we influence or affect his decisions?
- Rehearsals--branch and sequel development and reaction.

FFIR

- Scouts captured or compromised.
- Main bridge locations along ground route that have been blown.
- OPORD compromised.
- Expected personnel and equipment replacements that did not arrive.

OBSERVATION 4: Commanders often do not develop task organizations that support their scheme of maneuver for urban operations.

DISCUSSION 4: Task organization is the means by which commanders organize their units to accomplish specific tasks. Urban operations provide one of the few situations where infantry and armor elements may be effectively task organized below platoon levels.

TTP:

- Consider all phases of the operation from movement to the built-up area through consolidation and reorganization when developing task organization. Consider the capabilities and limitations of maneuver and combat support elements as related to specific tasks.
- An armor team with mechanized infantry and engineers is effective in route clearance to assault positions, breaching obstacles, seizing the initial foothold into the built-up area, defeating enemy armor counterattacks, and isolating the built-up area.
- Infantry companies are best suited for clearing built-up areas. Consider task organizing armored sections or platoons to infantry companies to support infantry movement when clearing buildings.
- Effect task organization as early as possible to allow units maximum time for combined arms rehearsals at the lowest levels.

4. PREPARATION.

OBSERVATION 5: After developing a thorough, well-synchronized plan, units should conduct combined arms rehearsals down to platoon and squad level and include all phases of the operation. Failure to rehearse is a consistent problem of units in the MOUT attack. Units rehearse to the wire or breach and then stop.

DISCUSSION 5: Urban combat requires closely synchronized actions of combined arms teams at all levels. Armor, artillery, engineer, chemical, aviation, close air support, information operations, and psychological operations units support the infantry. Effects of the combined arms team must be applied at the right time and place. Rehearsals should include all phases of the operation: isolation of the objective, clearing, consolidation on the objective, resupply, and casualty evacuation. When conducted properly, combined arms rehearsals identify potential problems in the synchronization of the plan between combat arms, combat support, and combat service support elements.

Rehearsals provide a means for units that seldom operate together to train collective skills. In urban operations, infantry squads and tank sections often work together during movement and clearing buildings. Since infantry squads and tanks seldom work so closely together, they need an opportunity to train together. This happens during rehearsals.

The key to effective rehearsals is to have participants perform the tasks they must accomplish under conditions that are as close as possible to those expected for the actual operation. Participants may maneuver their actual systems, models, or simulations while interactively verbalizing their elements' actions. Other types of rehearsals, such as backbriefs, are not as effective. **FM 17-15, Tank Platoon**, states, "*A rehearsal is different from the process of talking through what is supposed to happen.*" Rehearsals at the platoon and squad level are also critical in terms of tanks and infantry soldiers familiarizing themselves with each other's unique characteristics. An observer/controller's recent statement said it best: "Soldiers will not understand what they are supposed to do if they don't get a chance to do it. Talking about it just will not do it."

TTP: Conduct combined arms rehearsals at the lowest level of integration. Rehearsals should include:

- Communications procedures. Rehearse primary and alternate means of communications. Include use of visual signals. Also, when and where retransmit capability (retrans) move.
- Direct fire plan and control: sectors of fire, engagement criteria, methods of designating targets, and signals for lifting and shifting fires.
- Indirect fires: targets, triggers, observers, and signals for lifting and shifting fires.
- Breaching operations: mechanical, explosive, and manual breaches. Include clearance procedures prior to detonation, lane marking, and assault through the breach.
- Maneuver: movement to the assault position, movement between buildings (including use of armored vehicles to shield infantry), staging units.
- Casualty evacuation procedures.
- Start rehearsals early in the troop-leading procedures process. Some rehearsals can start shortly after receipt of warning orders. Units can rehearse drills such as breaching, clearing buildings, and moving between buildings before receiving a detailed plan. Infantry units can also rehearse aspects of operating in close proximity to armored vehicles.
- Rehearsals at all levels need to be stressed and executed.

5. EXECUTION.

OBSERVATION 6: Although urban combat operations execution is extremely decentralized and the control of units at all levels is difficult at best, the existing doctrine provides a more than adequate framework for successful operations in built-up areas. In the fight of Shugart-Gordon, is it typical to see the BLUFOR identify the location of critical enemy systems and fight everything around those systems.

DISCUSSION 6: A group of company and platoon observer/controllers were recently asked the following question: "Given the fact that urban operations requires a detailed plan for fire and maneuver, good graphic control measures, and a plan to deal with possible degraded communications ability, what unique command and control techniques have you seen implemented by units that have been able to efficiently maintain control of their subordinate elements during urban engagements?" The group hesitated for a moment and then in unison said "Nothing." They all agreed that the doctrinal principles as outlined in FM 90-10-1, especially Appendix K, "Close Quarters Combat Techniques," are solid and provide a good doctrinal base for clearing buildings. Also, most platoons and squads generally do well in accomplishing that task. The problem area continues to be movement between buildings, but that there is no mystical technique that will improve a unit's capability to do that. It all comes down to a detailed plan for fire and maneuver that is enemy focused, as opposed to having the lead element clear buildings until it is combat ineffective, and the next element coming in to pick up where the first

element left off. The former will lead to success and the latter leads to what one senior observer/controller described as "the pencil sharpener effect." Each unit is a pencil and they get fed into the pencil sharpener one at a time until they are ground down to the eraser.

TTP: There is no magical formula for maintaining positive control of maneuvering units, but observer/controllers and existing doctrine agree that the following components are required:

- A detailed plan for fire and maneuver outside and between buildings.
 - In order to mass and maintain momentum inside an urban fight one might apply the attack technique of penetration. Massed supporting fires on the critical location will likely provide the element entering the building the ability to reach it with enough force to overwhelm the enemy quickly.
 - Platoon and squad rehearsals of both movement between buildings and clearing actions inside buildings.
 - A detailed direct fire plan that is oriented on specific sectors (suppress windows A1-A5 on building 1) as opposed to random, undirected, unfocused suppression on anything that just happens to move.
 - Known marking procedures for rooms and buildings that have been cleared. These markings must be rehearsed during platoon and squad rehearsals. One of the functions of the rehearsal is that it should be used to conduct pre-combat inspections (PCIs) of the required marking equipment. (What are we using to mark, who is carrying it, and does every element have it?)
 - Known friendly identification markings that are rehearsed. *What is it and does everyone have it?* How are the riflemen going to be marked and how are the tanks/Bradleys going to be marked during hours of limited visibility?
 - A detailed plan for the use of indirect fire and all other supporting combat arms, combat support, and combat service support systems.
 - A communications exercise (COMMEX), either in conjunction with or in addition to rehearsals. There are unique communications challenges between mechanized and light elements, yet few units conduct any type of COMMEX to ensure they can talk.
-