

Battle Command to ISR Planning

by Major Kevin L. Jacobi

In the midst of Army Transformation and the creation of new and emerging doctrine and capstone manuals, it is challenging to stay abreast of current doctrine, much less interpret it and understand its application. This article examines battle command and seeing the battlefield; commander's critical information requirements (CCIR); tiers of reconnaissance; and intelligence, surveillance, and reconnaissance (ISR) planning.

Battle Command and Seeing the Battlefield

U.S. Army Field Manual (FM) 6-0, *Command and Control*, defines battle command as, "The exercise of command in operations against a hostile thinking opponent."¹ Decisionmaking and leadership are the two sides of battle command. This article focuses primarily on decisionmaking.

Visualize, Describe, Direct, and Lead. The latest doctrine states that the commanders' methodology for decisionmaking is visualize, describe, direct,

and lead, and results from combining the art of command and the science of control.

Visualize is the process of achieving a clear understanding of the forces' current state with relationship to the environment, developing a desired end state that represents mission accomplishment, and determining the sequence of activity that moves the force from its current state to the end state. Commanders describe their visualization by participating in the military decisionmaking process (MDMP), specifically through intent, planning guidance, and commander's critical information requirements (CCIR). Commanders then choose a course of action (COA) and communicate it through an order. Finally, commanders lead their units to mission accomplishment throughout the operations process.

Visualization is the single most important part of this methodology. Visualizing or seeing the battlefield is by no means a new concept. It has been embedded in our doctrine for decades. A

commander's ability to see and understand the components of the battlefield is fundamental to his decisionmaking. Although not graphically illustrated in FM 6-0, the commonly accepted components of the battlefield are terrain, enemy, and self. All three components affect each other, and the commander must understand the relationships between them:

- Terrain is neutral and affects both enemy and friendly forces; each side can use it to their advantage or demise.
- Enemy actions affect us and our actions affect the enemy.
- Self includes our own forces and support as well as other units involved in the operation.

Visualization, as well as the other parts of the methodology, occurs in all three steps of the operations process — plan, prepare, and execute. In each step of this process, visualization remains a cornerstone. However, it has different implications depending on where the commander is in the operations cycle.

Planning. During the planning phase, visualization is the most difficult to attain as there are a multitude of factors to grasp. Before the commander can begin to visualize how to get to the desired end state, he must first mentally attain situational awareness (SA) using:

- Mission. The unit's mission, task, and purpose and how it relates, or is nested, with the overall brigade and division operations, as well as understanding the commander's intent.



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- **Enemy.** Initially, how the enemy is an obstacle to the operation; subsequently more info will be needed.
- **Terrain and weather.** An absolute key aspect of visualization. Initial understanding may simply be major aspects of terrain and how it will impact options for both friendly and enemy forces; subsequently more info will be needed.
- **Troops and support available.** Initially, grasping troops to tasks to identify major shortcomings in units or support; subsequently more details on force ratios, resource allocation, and strengths will be needed.
- **Time available.** Time available, but initially how time relates to the process — plan, prepare, and execute; extremes on either end will drive how the commander executes the methodology.
- **Civil considerations.** Initially, may be controlled; subsequently a plethora of info may be needed.

The commander will gain SA or initial visualization as he begins his commander’s analysis of brigade warning orders (WO), participates with the brigade commander in collaboration, and listens to the brigade operation order (OPORD). The final validation or refinement of the task force commander’s visualization is when he receives his staff’s mission analysis — a key step that the staff must understand. This evolution of visualization will obviously vary based on experience, training, education, and knowledge of doctrine.² Not until the commander has first gained SA through seeing the battlefield and attains situational understanding (SU), can he achieve the higher level of visualization.

Commander’s Critical Information Requirements

Before we discuss other aspects of the preparation phase, it is necessary to examine CCIR. The key to understanding CCIR is to understand the categories of

information as described in FM 5-0, *Army Planning and Orders Production*.³ Although FM 6-0 is not as clear as FM 5-0 on the types of information — routine, critical, and exceptional — these types of information are still very relevant to how we do business. FM 5-0 states that, “CCIR has three components: priority intelligence requirements (PIR), friendly forces information requirements (FFIR), and essential elements of friendly information (EEFI).⁴ FM 6-0 drops the third, EEFI stating that, “Although not a CCIR, they become a priority once the commander states them.”⁵ Regardless of where EEFI belongs, CCIR are best understood when viewed holistically. Simply put, CCIR is about what decisions will be made and what types of information a commander needs to make those decisions. Figure 1 graphically explains CCIR, how it is related to seeing the battlefield, what the elements typically drive, and where they are found.

Preparation. FM 6-0 defines preparation as, “activities by the unit before execution to improve its ability to conduct the operation including, but not limited to, plan refinement, rehearsals, reconnaissance, coordination, inspections, and movement.”⁶ It further states that, “reconnaissance is often the most important part of the preparation phase, providing data that contribute to answering the CCIR. As such, the commander should plan and execute it with the same care as any other operation. The commander often launches reconnaissance before developing a complete plan. In fact, it is often necessary for reconnaissance to provide additional information on which to base the final plan.”⁷ This idea is not new; it is embedded in our troop-leading procedures at the lowest level. It is, however, easier said than done as demonstrated at our combat training centers (CTCs) and in countless Center for Army Lessons Learned articles on reconnaissance planning failures. During preparation, the commander up-

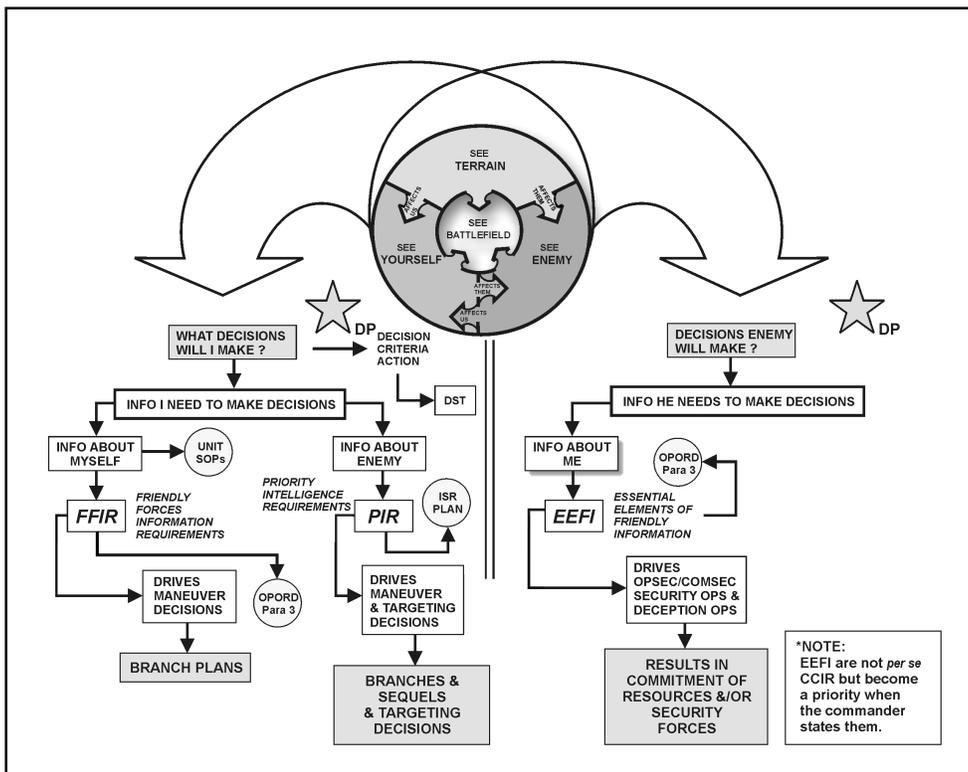


Figure 1. Seeing the Battlefield and CCIR Relationship

dates and validates his visualization as the results of the ISR operation become available.⁸ The commander must determine if new information invalidates the plan, requires adjustment to the plan, or validates it with no further changes. The earlier the commander identifies the need for modifications, the easier he can incorporate and synchronize them into the plan.

Tiers of Reconnaissance

To better illustrate how the ISR operations contribute to the commander's vision of the battlefield and what types of information are needed and when, we will examine a tactics, techniques, and procedures (TTP) whose foundation is based on FM 34-2-1, *Tactics, Techniques, and Procedures for Reconnaissance and Surveillance and Support to Counterreconnaissance, Offensive Reconnaissance Planning*.⁹ This FM identifies three general areas when planning for offensive operations; however, it lends more clarity to view it as four areas, or "tiers of reconnaissance."¹⁰ The four tiers of reconnaissance are:

- **Tier 1.** Occurs before the operation commences. Tier 1 answers voids in information. They are generally basic scout missions (route and zone reconnaissance) that facilitate the unit getting from the assembly areas or attack positions to the objective — often called "the approach march."

- **Tier 2.** Occurs preferably before, but may also occur as the main body begins execution. Tier 2 confirms the enemy's COA and validates the task force's base plan of attack. Tier 2 answers CCIR, such as for decision point (DP)-Tiger Strike North or Tiger Strike South. Tier 2 also answers information requirements (IR), such as maneuver event driven targeting information required to support the task force indirect fire plan.

- **Tier 3.** Here is where units often fail. Tier 3 is primarily surveillance and occurs during the operation. Tier 3 confirms the enemy's reaction to our base plan and provides the commander with the CCIR that he needs to arrive at a DP. Tier 3 DPs are usually maneuver based, such

as DP-Tiger Trap North, or targeting based such as a DP to commit field artillery or air assets to destroy high-value targets.

- **Tier 4.** Occurs after the decisive operation. Tier 3 is both reconnaissance focused on future operations answering general IR, and surveillance to maintain contact with the enemy. Tier 4 restarts the reconnaissance cycle.

ISR Planning

There has been, and continues to be, an extraordinary amount of energy expended on ISR planning for several reasons: reconnaissance and surveillance (R&S) planning is difficult; current doctrine only sporadically addresses how it is done; rapid planning maneuver CTCs are often not conducive to properly conducting ISR planning; and units have simply failed to give it the attention required to be successful. For these reasons, our reconnaissance operations have historically produced less-than-favorable results. Now we find ourselves replacing the old faithful R&S with the new supercharged ISR. An observer may conclude that the renaming occurred because it is a new thing we do, and much more complicated than some ole' archaic R&S mission. We now have, and are getting even more, sen-

sors, capabilities, and new digital systems that will launch us into the information superiority age, but the reality is that ISR or R&S planning basics remain the same.

Mission Analysis — Developing the Initial R&S Annex

Upcoming doctrine will probably read, "developing the initial ISR plan." This, in and of itself, will help. "Annex," although doctrinally correct, just does not have the horsepower that "plan" does. ISR planning can be examined by following the collection management cycle, which includes: developing requirements; developing the collection plan; tasking or requesting collection; dissemination; evaluating reports; updating ISR planning; and executing.

The collection management cycle is a good start to ISR planning but lacks the operators' "meat-and-potatoes approach." The following is the collection management cycle tailored more toward the operators:

Developing requirements. Not counting execution adjustments, collection requirements come from voids in IR and CCIR; the initial event template (IR and CCIR); the mature event template (from the wargame) that spawns

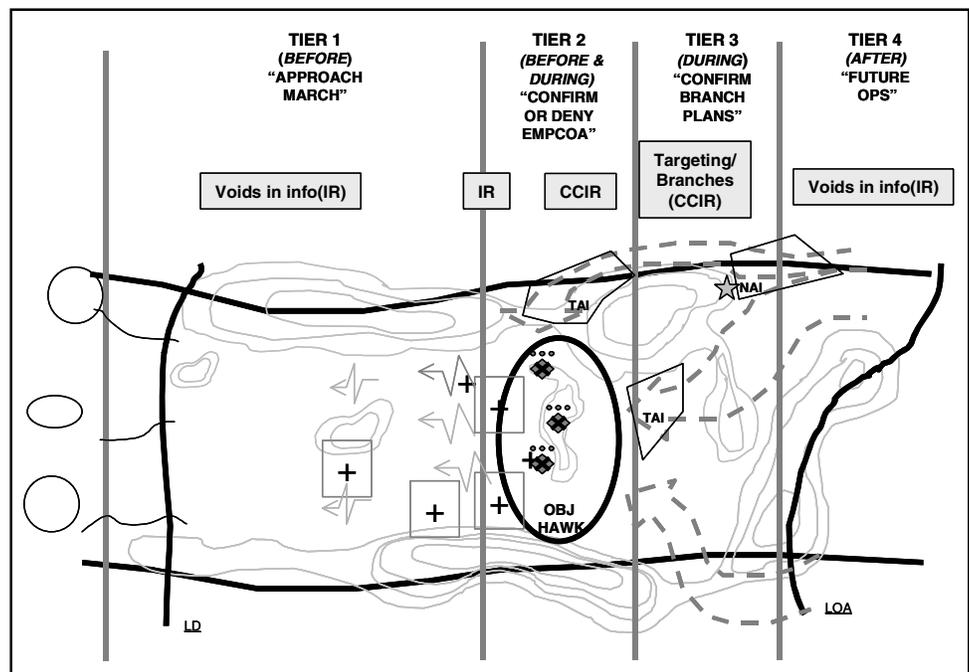


Figure 2. Tiers of Reconnaissance

the decision support template (DST) for CCIR; and external requirement — higher IR or CCIR and lower requests for information (RFI).

Once the commander receives the new mission, he immediately begins formulating an initial visualization through commander's analysis of brigade WOs, or collaboration with the brigade commander and listening to the brigade OPORD. During this early stage, the commander and staff will identify gaps in information that need to be filled. Some of these voids may be answered through RFIs to brigade, while others can be handled through the task force organic assets. The majority of these voids are probably Tier 1, but potentially Tier 2. Once the commander and staff complete the initial assessment of the new mission, the commander issues his initial guidance.

The commander's initial guidance for reconnaissance is based on information voids identified by him and his staff. The commander's initial guidance could include: how to abbreviate the MDMP; initial time allocation; initial ISR planning guidance to staff and/or initial recon to begin, usually based on movement; authorized movement; and additional staff tasks.

At this point, the staff is in a whirlwind analyzing tactical problems as well as beginning ISR planning based on the commander's guidance. Once the staff conducts intelligence preparation of the battlefield, it will generate terrain IR and enemy PIR.

Terrain IR is used to assess task force elements, such as the task force's ability to move tactically through mobility corridor 1 — or is it a defile; the task force's ability to cross a creek anywhere — are they restricted to fords or just two bridges; or can they use the area for an attack position?

Enemy PIR is the contrast between situation templates, which will yield the initial event template. The initial event template will only focus on identifying which COA the enemy has adopted — primarily a Tier 2 focus. The staff combines the commander's initial guidance for reconnaissance and the initial event template, which includes named areas of interest that indicate a particular enemy course of action (PIR) with any terrain IR and external IR to form the initial ISR plan. The initial event template is the base graphics for that plan.

Developing the plan. Now that we know what ISR assets do initially, the staff integrates all the ISR assets into a plan such as developing a COA. There are a plethora of considerations such as availability, capability, vulnerability, performance history, cueing, redundancy, mix, and integration. Once the staff has developed the plan, it must make all provisions necessary for its success — the scheme of support, better known as a wargame. Several issues must be addressed, to include: other reconnaissance assets in the AO; location, mission, and specific instructions to scouts; maneuver support, fire control measures, or extraction considerations; air defense artillery and Army airspace command and control measures; what kind of fire support scouts need; does it have to move to support them; is there a requirement for essential fire support tasks, fire support coordination measures, mobility, countermobility, and survivability assets; what kind of logistics do they need; do they need Class I, III, or V medical and maintenance support and evacuation; what about communications and long-range comms; does retrans need to move; and does the tactical operations center (TOC) need to move? These are just a few questions, but the questions will not be asked unless the staff wargames the action. This wargame is not a democratic COA analysis however, there is no time for that, it is a synch drill of the battlefield operating system to ensure ISR operation is not just successful, but actually supports the commander's decisionmaking.

Once the task force commander is ready to receive his staff's mission analysis, including the proposed initial ISR plan, his SA has evolved into SU — not only can he see the battlefield, he understands it — which has perpetuated his visualization. He will describe that visualization as apart of his planning guidance. However, the mission analysis, particularly the ISR portion, is critical to ensure that the commander has a full appreciation for the battlefield, and the staff has properly identified the tactical problems. During the brief, the staff's analysis helps the commander verify his visualization. The commander approves, or approves with additions, the initial ISR plan during the mission analysis brief. Once approved, reconnaissance can begin. Accomplishing all this at mission analysis is obviously the challenge. What is realistic, yet timely enough to do what

our doctrine says initial reconnaissance is supposed to do — and give it time to do it? Is it possible that all our high-speed planning guides that say one to two hours to mission analysis brief are wrong? Or are they right and we just have not cracked the code on getting the ISR plan done in time? Maybe the reader has some TTP that will help bridge the gap, or perhaps the new FM 5-0 or FM 3-55, *Intelligence, Surveillance, and Reconnaissance*, will lend some clarity to this dilemma.¹¹ Reader's comments are welcome.

Tasking or Requesting Collection

Tasking collection is done through the ISR order. Whatever TTP is used to communicate the order, such as matrix, written, sketches, or a combination, it must be flexible and user friendly to accommodate receiving new tasks and instructions. These additional tasks and instructions may occur throughout the operation, but we know for sure that additions will be added after the task force completes COA analysis and the DST. In a time-constrained environment, the initial ISR order may be as simple as an ISR graphic with matrix issued to scouts and other assets. However, when time is available, it is preferable for ISR assets to be briefed by the task force staff in addition to receiving the graphics and order. This method is also preferred because it gives the task force commander an opportunity to personally convey his focus for reconnaissance to his scouts. Upon completion of COA analysis and the DST, fragmentary orders (FRAGO) are used to refocus and add requirements to the ISR executors, based on the DST architecture. This is vital because it provides the scout with critical Tier 3 collection requirements that support the most up-to-date CCIR. The method of dissemination is probably frequency modulation or digital. Due to the criticality of ISR assets receiving and understanding these requirements, it is paramount this skill is trained regularly between the TOC and the scouts. Understanding, familiarity, and good standing operating procedures between the TOC and the scouts will help this crucial communications exercise be successful.

Dissemination. The ultimate goal of dissemination is to get the right information into the hands of the decision-maker in time for him to make a sound decision. Planners arrange direct dis-

semination whenever possible. For example, information regarding NAI 1 that triggers target area of interest (TAI) 1, the task force allocation of close air support (CAS) should go directly to the task force commander on the task force command net, the battle captain and S2 are checking the information against the CCIR/decision support matrix to see if it meets the criteria and is what the commander wants to target. The fire support officer, air liaison officer, and air defense officer are monitoring and are beginning to lean forward. The battle captain and S2 quickly agree and the battle captain pushes to talk and makes the recommendation to the commander to execute DP 1 — CAS in EA HAWK to destroy the MIBN reserve. A good ISR plan directs the collectors on what net information is to be passed and to whom. The other mark of a good ISR order is that it's not only included in the task force OPORD, but it is integrated with maneuver to ensure a full synchronization between maneuver and ISR.

The last topic to remember about dissemination is perishability. During execution, most information from reconnaissance elements sitting in Tier 2 and Tier 3 is combat information. Combat information is unevaluated data, gathered by or provided directly to the tactical commander that, due to its highly perishable nature or the criticality of the situation, cannot be processed into tactical intelligence in time to satisfy the user's tactical intelligence requirements.

Evaluating reports. Throughout preparation, the scouts are sending vital information to the task force. The task force XO oversees the S2 and battle captain who track the status of each specific order and request (SOR), and analyze specific IR and PIR. They pay particular attention to which assets are not producing the required results. It is very likely that the staff's assumptions about the threat COAs will not prove entirely correct. The XO, S2, and S3 assess the value of the information from collection assets and refine SORs to fill gaps during execution. The commander's evaluation of this information is also very critical to his visualization. As friendly assumptions prove true or false, as reconnaissance confirms or denies enemy actions and dispositions, and the status of friendly units change, the commander adjusts or aborts his plan to account for the current situation. He determines whether new in-

formation invalidates the plan, requires him to adjust it, or validates it with no further changes. He balances the loss of synchronization and coordination caused from changing the plan against the problem of trying to execute a plan that no longer fits reality.¹² Changes in the plan will result in changes to the intelligence requirements or adjustments to the collection timeline.

Updating intelligence, surveillance, and reconnaissance planning. As stated above, the ISR plan will require adjustment during execution. The following factors could drive changes to the ISR plan:

- The commander generates new CCIR as he refines or adjusts the COA to fit the current battlefield situation.
- An SOR is satisfied or overcome by events and frees an asset for other operations.
- A single asset has unexpected success, freeing redundant assets for other operations.
- An asset cues the task force staff, but requires confirmation that requires dynamic retasking of other assets.
- Timing the operation has become desynchronized which requires modifying the latest time information is of value (LTIOV) or changing priority.
- Higher headquarters orders the task force into an unplanned operation.

Executing. During execution, the commander's ability to see the battlefield feeds his SA of terrain, enemy, and self; a clear mental picture of these facilitates his SU. The commander's SU is fleeting — he may slip in and out of it depending on his ability to accurately see the battlefield. If the commander's visualization is accurate and still applies to the tactical situation, his CCIR are valid and he continues to follow the plan and the execution decisions already identified in Tier 3. However, the commander's assessment of the operation may change his visualization to fit a changed tactical situation, such as exploit an unplanned opportunity, counter an unexpected threat, or change it from an unsuccessful decisive operation to a more successful shaping operation.¹³ These are called adjustment decisions, and require a commander to describe the new visualization to subordinates and staff so that they understand the intent and can adjust the execution and exercise initiative in their area of responsibility.

Although this examination of theory is based on doctrine, it is permeated with the author's interpretation and opinion. As the Army continues to transform and move into the information superiority age, it is appropriate to revisit what we already know as a point of departure into unknown territory. "Reconnaissance has always been, and will continue to be, the precursor to all operations. As such, we must plan with the same care as we do for any other operation."¹⁴ Anything less will hinder the commander's ability to see the battlefield and make decisions at the right time and place.

Notes

¹U.S. Army Field Manual (FM) 6-0, *Command and Control (DRAG Edition)*, U.S. Government Printing Office (GPO), Washington, DC, 2001.

²*Ibid.*, p. 2-4.

³FM 5-0, *Army Planning and Orders Production*, GPO, Washington, DC, TPB.

⁴*Ibid.*

⁵FM 6-0.

⁶*Ibid.*

⁷*Ibid.*, p. 6-12.

⁸*Ibid.*, p. 4-12.

⁹FM 34-2-1, *Tactics, Techniques, and Procedures for Reconnaissance and Surveillance and Intelligence Support to Counterreconnaissance*, GPO, Washington, DC, 19 June 1991.

¹⁰*Ibid.*

¹¹FM 5-0; and FM 3-55, *Intelligence, Surveillance, and Reconnaissance*, GPO, Washington, DC, TBP.

¹²FM 6-0, p. 6-13.

¹³*Ibid.*, p. 6-25.

¹⁴Quote from Major Gregg Athey, Chief, Cavalry Branch, Directorate of Training and Doctrine Development.

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