

Technical Sergeant Justin Davis, tactical air control party specialist with 137th Special Operations Wing, Oklahoma National Guard, acts as intelligence, surveillance, and reconnaissance air asset for multinational military members participating in antipiracy exercise on vessel moored at shore base facility during Tradewinds 23 in Georgetown, Guyana, July 24, 2023 (U.S. Air National Guard/Brigette Waltermire)

## Commander's Critical Information Requirements

# Crucial for Decisionmaking and Joint Synchronization

By Christopher R. Bolton and Matthew R. Prescott

cross the competition continuum, speed of action requires timely decisions and adjustments to a joint task force (JTF) operation plan. As mission command systems improve and information-gathering

Commander Christopher R. Bolton, USN, is an Intelligence Advisor at the NATO Joint Warfare Center. Lieutenant Colonel Matthew R. Prescott, USA, is an Operational Planning Advisor at the NATO Joint Warfare Center. tools increase in sophistication, a consistent challenge for a headquarters staff is determining the relevant information to analyze for decisionmaking. Arguably, increased mission command technology and capabilities have outpaced decisionmaking performance, leaving then U.S. Army Chief of Staff General Mark A. Milley to remark, "The sheer volume and speed of conflicting information can easily bring decisionmaking to a screeching halt." However, command-

er's critical information requirements (CCIRs) are designed specifically to combat these challenges and enable the commander's decisionmaking process.

CCIRs remain critical throughout an operation. Unfortunately, key observations of recent operational-level exercises of JTF commands and their components in the Armed Forces and North Atlantic Treaty Organization illustrate that the development and use of CCIRs lack holistic staff understanding and are often not



Marine Corps Lance Corporal Megan Roundpoint, motor transportation vehicle operator with Combat Logistics Battalion 11, Combat Logistics Regiment 17, 1st Marine Logistics Group, communicates via radio during Adversary Force Exercise as part of Service Level Training Exercise 2-24 at Marine Corps Air-Ground Combat Center, Twentynine Palms, California, January 31, 2024 (U.S. Marine Corps/Justin J. Marty)

fully valued or managed to enable timely decisionmaking by the commander.<sup>2</sup> Despite these observations and lessons identified, organizations continue to fight from their original plan, without adapting their approach to achieve objectives that remain relevant to an ever-changing operational environment (OE).

This article is intended for staff officers who desire better understanding of the connection between CCIRs and decision points, and how CCIRs enable joint synchronization through headquarters fusion and command involvement. Operational-level staffs consistently misunderstand the purpose of CCIRs, resulting in suboptimal staff contributions to the commander's decisionmaking process. When optimized, CCIRs become a critical factor that prioritizes information that a commander needs to make decisions, thereby enabling joint synchronization and aligning the JTF, across all domains, to achieve mission success.

This article describes the importance of CCIRs, offers techniques to develop CCIRs to ensure they are tied to decision points, and relates CCIRs development and use across all three planning horizons. Last, the article recommends how head-quarters should use CCIRs and decision support tools across an operation and describes several recommendations joint doctrine should incorporate to improve CCIR understanding across the joint force.

#### The Importance of CCIRs

Successful commanders identify and approve critical information requirements to answer knowledge gaps, evaluate a situation, confirm or deny planning assumptions, and develop a successful approach to accomplish military objectives. Many of these commanders consider identifying critical information as a commander's business.<sup>3</sup> Joint doctrine defines *CCIRs* as "elements of information the commander identifies as being critical to timely

decision making."<sup>4</sup> They are unknown *but needed* information elements of such critical importance to enable the commander's decisionmaking process and directly relate to criteria needed to execute successful operations.<sup>5</sup>

CCIRs drive the collection of information by all elements across the command and consist of two components: priority intelligence requirements (PIRs) and friendly force information requirements (FFIRs). These two components represent the commander's and staff's knowledge gaps throughout the joint planning process (JPP) and execution and require continuous evaluation.

PIRs focus on both the adversary and conditions within the OE and link to the commander's decision points. All staff sections can recommend potential PIRs they believe meet the commander's guidance. However, the JTF J2 has overall staff responsibility for consolidating PIR nominations and providing the staff's recommendations to the commander.<sup>6</sup>

PIRs represent an intelligence gap that normally identifies opportunities or threats for the JTF. Once approved by the commander, they provide the focus for joint intelligence, surveillance, and reconnaissance (JISR) assets. PIRs must be specific to at least one decision point but sufficiently broad in scope to enable the J2 to develop a detailed intelligence collection plan (ICP) to enable the commander's decisionmaking process.

When discussing enabling the decisionmaking process, Lieutenant General Scott Berrier, USA, then director of the Defense Intelligence Agency, noted a crucial aspect of intelligence requirements: "[I]t's my job to make sure that we can illuminate [threat] activities to the Department of Defense so that our senior leaders can make . . . smart decisions about next steps. And so, from my perch . . . I want to deliver decisive information at the right time to [DOD leadership], so they can have an understanding of what's going on and give them options of what actions to take." The "decisive information" to answer "what's going on" is the intelligence collection and analysis against PIRs to deliver "understanding" to senior leaders, which enable decisions of what "actions to take."

FFIRs focus on information that a headquarters must have to assess the status of friendly forces and supporting capabilities. FFIRs form the friendly force information criteria needed for the commander to decide. To ensure the headquarters can take advantage of opportunities or mitigate threats, FFIRs prioritize reporting requirements for supporting and subordinate commands. Like PIRs, all staff sections can recommend potential FFIRs they believe meet the commander's guidance, and once approved by the commander, are automatically CCIRs. PIRs and FFIRs constitute the total list of CCIRs.8

When reviewing how PIRs and FFIRs are described in joint doctrine, PIRs are sufficiently described particularly within Joint Publication (JP) 2-0, Joint Intelligence, and JP 2-1, Joint and National Intelligence Support to Military Operations.

However, there is minimal attention paid in joint doctrine to describe

and illustrate the importance of FFIRs and how they directly link to decision points. FFIRs focus on forces, capabilities, and ideally the timing available to support joint action. Because FFIRs focus across the JTF, collaboration and synthesis are required across all joint functions to ensure forces, capabilities, and support requirements are synchronized in time and space. This is traditionally why the J5 or J35 is responsible for developing FFIRs, depending on the time horizon of the decision. Without staff analysis conducted on FFIRs, the facts about an adversary and the environment are of little value unless the commander understands what forces and capabilities are directly available to mitigate or exploit a threat. Answered FFIRs are a valuable tool to support risk management and form the friendly force criteria to allow the commander to decide.

Although not in doctrine, a best practice when operating in a multinational environment is the development of Host Nation Information Requirements (HNIRs) to confirm information, effectively plan, and increase interoperability with the host-nation's military and civilian institutions. The genesis of HNIRs dates back to joint operations in Afghanistan and Iraq where commanders acknowledged that mission success was achieved by, with, and through multinational and host-nation partnerships. Now understanding the importance, purpose,

and composition of CCIRs, staffs can avoid misconceptions and better develop CCIRs to support a commander's decisionmaking (see table 1).

#### **Developing CCIRs**

The single most important person in the development of CCIRs is the commander. CCIRs are developed and maintained due to the constant uncertainty present in an OE. Knowledge gaps in an assigned joint operational area (JOA) are normal for all commanders. To maintain situational understanding, the commander, through his or her staff, should determine the essential information he or she needs for continued decisionmaking. Essential information can be broken down into four basic areas:<sup>10</sup>

- What actions can or will the adversary(s) adopt that will either interfere with or present opportunities for the JTF to accomplish its mission?
- What is the next major decision foreseen at this time, and what information is needed to make it?
- What information about the terrain or environment is needed that is presently unknown?
- What force or support capabilities are required to accomplish objectives and maintain the initiative, operational tempo, or JTF operational reach?

As a headquarters completes the steps of the JPP, CCIRs are developed

### Table 1. Examples of Notional PIR, FFIR, and HNIR Tied to a Decision Point

#### Decision Point: Activation of barrier plan activities and denial operations

#### Priority Intelligence Requirements (PIR)

- Indications of unambiguous warnings of an attack, or there is a high probability of a border incursion.
- Increased adversary ISR activity along the border.
- Mobilization and movement of adversary operational reserve toward frontline forces.
- Increased hybrid/asymmetric activity in the vicinity of the border.
- Adversary messaging increases in hostility.

#### Friendly Forces Information Requirements (FFIR)

- Diplomatic efforts cannot deescalate the situation.
- JTF commander has the authority to conduct barrier plan operation.
- Forces are postured and resourced to conduct barrier and denial operations.

#### **Host Nation Information Requirements (HNIR)**

- Host Nation concurrence to activate barrier plans and conduct denial operations.
- Liaison with Host Nation defense forces established.

primarily to answer knowledge gaps and enable the JTF to select the best course of action to accomplish assigned objectives. Commanders assist with CCIR development through their planning guidance and directed information requirements to better understand the OE. A headquarters staff assists in the development of CCIRs by analyzing the political and higher headquarters' planning directives and by anticipating likely decisions the commander will make throughout an operation.

The advantages of developing CCIRs early during the JPP are numerous. CCIRs enable parallel planning, promote mission command, and provide focused requirements for JISR assets to answer the commander's intelligence gaps. Developing CCIRs early and issuing them through warning orders enable supporting and subordinate commands to organize and task JISR assets to answer critical information requirements to enable further planning. However, due to various reasons, many staffs and commanders have difficulty developing their initial CCIRs as an output of mission analysis with a complementing initial ICP to synchronize JISR assets to confirm

information requirements needed for course of action development.

One technique to ensure the development of CCIRs is aligned with decisionmaking is to backward-plan CCIRs off anticipated decision points. During this technique, a commander and staff first analyze the potential decision points required throughout an operation. Only after potential decision points are analyzed can a staff then determine necessary PIRs and FFIRs that meet the criteria for the commander to decide. This technique is most useful during the initial steps of the JPP, but subsequent decision points and CCIRs will be further refined during the remainder of planning or adapted during an operation based off the changes in the OE.

Backward-planning CCIRs off anticipated decision points naturally leads to the development of decision support tools such as a decision support matrix (DSM). The simplest form of a DSM is using an if-and-then methodology. This method begins by clearly defining the issue and decision required in either a statement or in the form of a question. Once complete, staff should determine the necessary PIRs relevant to

the decision that requires confirmation. Only after PIRs are developed can a staff determine the FFIRs—this is required to be in place for a commander to reach the decision criteria. Once PIRs and FFIRs are determined, the last part is to clearly label the decision a commander is required to make or request to their higher headquarters. The "if" represents PIRs, "and" represents the confirmed FFIRs, and lastly "then" states the decision to be made once the PIR and FFIR criteria are met (see tables 2 and 3). Decision support tools such as the DSM are useful to predict when the conditions are likely met for a commander's decision; however, judgment for when the decision is made remains with the commander.

Once the staff better understands how its commander prefers to receive information to support decisionmaking, DSMs should be updated to include important information relating to time and risk. Throughout the development of anticipated decision points, it is important for both the commander and the staff to recognize that some decisions exceed the authority of the commander. When this occurs, the staff alerts their higher headquarters when conditions are met for

#### Table 2. Instructions on Producing a Generic Decision Support Matrix

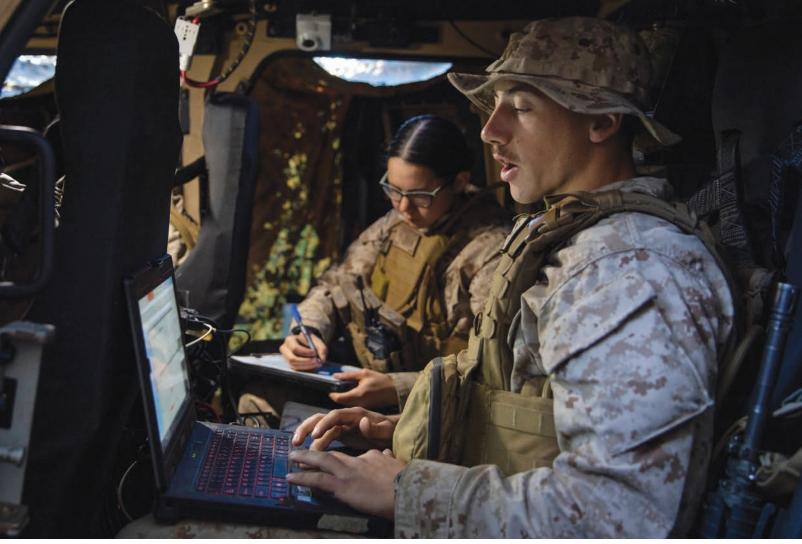
#### Clearly define the issue and decision required in a statement or question form

IF (PIR)	AND (FFIR)	THEN (DP)
Provide the needed and confirmed adversary or environmental indicators and warnings that are relevant to this decision.	Provide the relevant confirmed friendly force facts required to "be-in-place" for the commander to make a decision.	Provide what decision the commander should make (and when, if necessary).

#### **Table 3. Decision Support Matrix Example**

#### Activation of extended, expanded, or alternate theater distribution network

IF (PIR)	AND (FFIR)	THEN (DP)	
Adversarial capability or action renders the existing distribution network (or portion of) indefensible or presents an unacceptable risk to materiel, forces, or infrastructure.	The current capacity of the distribution network of individual LOCs is assessed as insufficient to accomplish RSOI and/or sustainment of the JTF.      Host Nation(s) approves access to and use of the requested routes, areas, new APODs/SPODs, and/or infrastructure.	Request to higher headquarters the approval of extended, expanded, or alternate theater distribution network.	
2. Environmental conditions impede or deny prolonged use or access to the existing distribution network (or portions of).	<ol> <li>An expanded, extended, or alternate distribution network can protect and sustain the force with greater efficiency/capacity than the current system.</li> </ol>		
	4. Joint logistic strategic enablers (USTRANSCOM, DLA, etc.) have the resources and capacity to provide materiel into the expanded distribution network.		
	5. Theater-level sustainment headquarters have the staff, force structure, and/or contracted capacity to manage the expanded distribution network without risk to other sustainment functions.		



Marine Corps Corporal Ayman Moser, field artillery fire controller with Tango Battery, 1st Battalion, 11th Marine Regiment, 1st Marine Division, relays call for fire during exercise Steel Knight 23.2 at Marine Corps Base Camp Pendleton, California, December 5, 2023 (U.S. Marine Corps/Adeola Adetimehin)

the higher headquarters' commander to approve the recommended decision by the subordinate commander. Through parallel planning and joint synchronization, commanders and staffs can assist decisionmaking across echelon.

To ease the development of CCIRs even further, a headquarters should maintain a running list of common decision points a commander could likely make during an operation, such as:

- change of task organization or command relationship
- change of main effort or operational priority
- phase transition
- movement/repositioning of an operational or strategic asset
- expanding, extending, or creating an alternate theater distribution network commitment of a Reserve
- execution of a branch or sequel.

If or when these common decision points are required or relate to the assigned mission, a staff should use the if-and-then methodology to determine the needed PIR and FFIR criteria for the decision point. By thinking through anticipated decisions, a staff can better develop the necessary PIRs, FFIRs, timings of a decision, and risk management requirements to enable the commander's decisionmaking process.

Starting with a generic running list of decision points, with complementing PIRs and FFIRs, could enable faster planning, promote a critical thinking culture for continuous wargaming, and better set conditions for the JTF to prepare the environment for deployment, seize the initiative, or exploit opportunities. Once senior leaders in the headquarters approve a common decision point list, they should be included within planning

standard operating procedures (SOPs) and rehearsed during collective training events to refine CCIR requirements and decision support tools.

#### **CCIR** in Execution

CCIRs enable the commander's decisionmaking process and remain critical throughout an operation. PIRs focus the commander's JISR activities, while FFIRs provide how the commander understands the status of supporting and subordinate units and capabilities during an operation. In planning and execution of an operation, PIRs and FFIRs must be identified and assigned, and a process of reporting must be implemented to manage CCIRs.<sup>11</sup>

Nonetheless, personal observations from operational-level exercises and recorded observations from the Joint Lessons Learned Information System and

Center for Army Lessons Learned reveal the following key observations:

- many units lack efficient reporting mechanisms to enable CCIRs to remain relevant under changing circumstances
- headquarters do not adequately integrate PIRs into their ICPs to prioritize collection and assessment across an operation
- units are misaligning CCIRs with a commander's notification requirements.<sup>12</sup>

#### CCIRs Through Each Planning

*Horizon.* The life cycle of CCIRs across all planning horizons (short, mid, and long term) is dependent on the commander's understanding and assessment of the environment and if the CCIRaligned decision points remain relevant in an operation. The duration of each planning horizon may vary depending on the headquarters SOPs and the type of operation the JTF is conducting. Traditionally, the short-term planning horizon, owned by the J33, focuses on the execution of current operations. The mid-term planning horizon, owned by the J35, validates, refines, and, if required, redirects future operations using the orders process. The J5 focuses on the long-term planning horizon, typically the next phase of the operation, to set conditions for future planned operations through detailed planning and assessment.

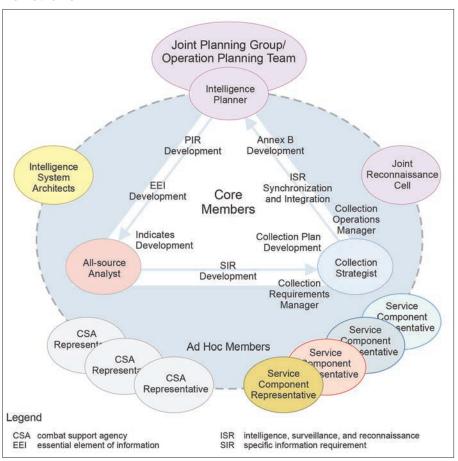
In all planning horizons, CCIRs play a critical role in assisting decisionmaking. As decision points draw nearer to execution, prioritization of collection assets and reporting requirements must account for time sensitivity when associated decisions need to occur. Nevertheless, at the JTF and operational levels, it is unlikely that decisions are made during the short-term planning horizon. At the operational level, decisions are comparatively more comprehensive across time and space from those at the tactical level to account for when the decision needs to occur versus when and where the conditions are set to achieve the effect. This "notice-to-effect" considers the entire JOA and realistically cannot take place within the short-term planning horizon.

Using and answering CCIRs allow a headquarters to remain ahead of the commander's decisionmaking cycle. During execution, approved CCIRs and decision points should already have contingency plans with associated decision support tools developed by the J35 or J5 based on the likelihood they will be implemented. CCIR-associated decision support matrices assist with decision point anticipation and execution as the situation evolves in favor of, or against, the JTF. To ensure decisions remain at the speed of relevance, contingency plans should include draft changes in task organization, command relationship adjustments, and synchronization matrices. Once the situation dictates a decision by the commander, these prearranged planning products allow the staff to immediately finalize and issue the necessary orders to subordinate and

supporting commands to minimize the notice-to-effect lag time.

However, throughout an operation, events will occur that require timely notification to the commander but do not require a CCIR-driven decision by the commander. A reoccurring challenge for headquarters is the misunderstanding that significant events requiring command-level notification are CCIRs.13 This type of notification is called a commander's notification requirement. Sometimes referred to as serious incident reports, they are not CCIRs but do require a command-approved process to manage this important information. Commander's notification requirements often necessitate a reporting requirement to higher headquarters and, potentially, a press release to mitigate associated negative effects, all of which can be already authorized in a joint

Figure. Notional Intelligence Planning Team and Related Functions



Source: Joint Publication 2-0, Joint Intelligence (Washington, DC: The Joint Staff, 2013), IV-6.

operations center (JOC) preplanned response checklist.

Linking CCIRs to the Collection and Analysis Cycle. Across all planning horizons, commanders at all levels depend on timely, accurate information and intelligence on an adversary's disposition, strategy, tactics, intent, objectives, strengths, weaknesses, values, capabilities, and critical vulnerabilities to answer CCIRs. The intelligence process is composed of a wide variety of interrelated intelligence activities:

- planning and direction
- tasking and collection
- processing and exploitation
- analysis and production
- dissemination and integration
- evaluation and feedback.

Joint intelligence elements support planning and execution by providing information, finished intelligence products, and targeting information to the JTF and component commands (see figure).<sup>14</sup>

These intelligence activities, in collaboration with the J3 and J5, must focus on the commander's mission, CCIRs, and therefore inform the commander's decisionmaking process.<sup>15</sup>

While the J33 is managing current operations through mission command systems via the JOC, the decision support tools provided by the J35 and J5 enable the headquarters to efficiently track CCIR reporting requirements and ongoing operations in the OE. Concurrently, the J2 aligns intelligence activities in close cooperation with all staff elements, executing the ICP focused on CCIR-derived PIR. The J2's component divisions typically (and most effectively) synchronize their personnel activities with the J3 and J5 directorate staffs.16 The current intelligence watch and analysis staff support the J33 current operations staff. Intelligence operations, collection management, and ISR planning staff are often in direct contact with the J35, among other divisions, especially when supporting the joint collection management, targeting, and assessment boards. Finally, the intelligence plans and analysis staff supports the J5, especially during contingency planning. The commander's requirements drive staff operations across all J-codes and special staff as well as subordinate and supporting commands to expend resources to answer these requirements, thereby manifesting the environment where the commander makes a decision.

Intelligence operations answer PIRs, which answer CCIRs. Based on intelligence requirements, associated information requirements and indicators are organized into a detailed ICP. Within the collection plan, PIRs are further broken down into essential elements of information (EEIs) and specific information requirements (SIRs). Answered EEIs and SIRs assist in gaining better clarity on the intentions of an adversary as well as the composition, disposition, and strength of opposing forces (see table 4). The collection plan may be either a simple,

Table 4. Example of Notional PIR, EEI, and SIR Linkages

Conventional Threat			Unconventional Threat		
PIR	EEI	SIR	PIR	EEI	SIR
warnings that Adversary armed forces will attack friendly forces.	1.1. What is the Adversary armed forces disposition?	1.1.1. Where are Adversary intelligence collectors located?	2. Indicators and warnings of Host Nation Defense Security Forces (HNDSF) defecting to anti-government elements.	2.1. To what extent do HNDSF collaborate with anti-government elements (in terms of training, planning, and execution of conventional and unconventional attacks)?	2.1.1. Report events and incidents that can be linked to both HNDSF and anti-government elements.
		1.1.2. What is the current location and range of Adversary land-based artillery and missile systems?			2.1.2. Identify linkage and relationship between HNDSF leaders and anti- government element leaders.
		1.1.3. Where are Adversary amphibious task groups located?		2.2. Are there any indicators and warnings that HNDSF conduct military actions against local population or infrastructures?	2.2.1. Report any meetings held between HNDSF and anti-government element key leaders.
		1.1.4. Where are Adversary air assault and airborne units located?			
	1.2. How, where, and when will Adversary armed forces attack friendly forces?	1.2.1. Where will Adversary armed forces attack?			2.2.2. Report any equipment/ personnel that depart established assembly and cantonment area
		1.2.2. When will attack occur?			
		1.2.3. What forces will attack?			



single-discipline spreadsheet or a complex, multidiscipline, multimedia software tool containing various spreadsheets and other metadata, such as the reconnaissance, surveillance, tasking, and acquisition annex to the air tasking order produced by a theater air operations center. The ICP enables the J2 to look across the JTF and determine which commands and IISR assets are best suited to answer EEIs and SIRs. Once finalized across echelon, the collection asset allocation plan includes PIRs, their associated EEIs and SIRs, and component collection assets to be tasked, or additional collection resources for the operational commander to request. It also includes when the information report is needed and who is to receive it. The completed collection plan forms the basis for further collection actions against PIRs and, therefore, CCIRs.17

After successful receipt of a higher headquarters' CCIRs, EEIs, and SIRs, subordinate units are tasked, and they determine how best to contribute to answering the JTF CCIRs. This process

promotes mission command by centralizing information requirements across the JTF, which increases synchronization and enables prioritization of resources and tasks. The JOC assists with component synchronization by ensuring information-sharing across echelon, especially when subordinate commander decisions are made. This approach also enables decisionmaking at the tactical level while keeping the JTF focused at the operational level.<sup>18</sup>

CCIRs remain fluid as the JTF moves through the JPP and phases of the operation. To enable situational understanding and promote adaptation, the collection plan will be prioritized across the operation plan to enable decisionmaking and needed adjustments. The JTF must therefore develop CCIRs that deliberately feed into the analysis and assessment of how well the operation is progressing.

CCIRs Assisting with Operational Assessments. Throughout an operation, CCIRs may not be answered in the JOC within the short-term planning horizon

but rather through analysis provided during the assessment process. However, operations assessment, which is dependent on evaluation and feedback from actors and events within the OE, is often deprioritized in intelligence processes. <sup>19</sup> Regardless of the type of military operation, joint headquarters should use CCIRs in conjunction with operational priorities to focus and synchronize collection and analysis assets to support all three planning horizons.

CCIRs play a role in evaluating the quality of understanding and assessment toward the JTF's progress in an operation. As a headquarters conducts the assessment process, CCIRs support the JTF's understanding of whether it is doing the right things—and the right things are being done correctly. To ensure decisions are tied to desired effects and the status of operational objectives, measures of effectiveness and measures of performance must assist with answering PIRs, FFIRs, and HNIRs.<sup>20</sup> When actions, effects, and objectives are not changing the environment



positively, CCIRs embedded into the assessment process allow the commander to know when the operational design requires reframing and adaptation.

Although the J5 is responsible for long-term planning and has large equities in operations assessment, developing assessment-oriented CCIRs requires an integrated cross-functional headquarters approach. Staff officers must actively take part in assessment working groups to ensure inputs and outputs are oriented to answer the commander's priorities and enable decisionmaking. Assessment-oriented CCIRs may lead to decisions that require additional force capabilities, authorities, or command and control mechanisms, which take much longer to resource and are therefore better suited as CCIRs in the long-term planning horizon. By deliberately thinking through CCIRs that aid in assessing the OE, a headquarters will better predict long-term decisions to ensure the JTF maintains the initiative, tempo, and operational reach.

#### Recommendations

*Developing CCIRs.* When developing CCIRs, a headquarters should stage the development, tracking, and refinement of CCIRs to achieve situational understanding of the OE, manage ongoing operations, and prepare for and anticipate future operations. To remain valuable to the commander, CCIRs must be oriented on enabling decisionmaking through the confirmation of PIRs, FFIRs, and HNIRs. Conceptualizing CCIRs in three stages could lead to the development of a seemingly long list of CCIRs, which goes against the recommendation of JP 5-0, Joint Planning, to maintain a short list of CCIRs.21 However, what may initially seem like a long list of CCIRs actually is manageable when staff prioritize CCIRs on the next decision point and greatest risk to the JTF, deprioritize CCIRs when no longer relevant, and recommend delegation of decision authority to subordinate commanders based on the level of risk and comfort level of the commander. Delegating decision authority enables decentralization. Moreover, to enable mission command and minimize risk, commanders should communicate clear guidance and intent to the delegated decision authority.

To add clarity and organization when listing CCIRs, staff should link the decision point they support and timing for when the decision is anticipated. Visually presenting the linkage between the CCIR to the decision point, rather than a generic list of CCIRs, enables better understanding across echelon. Simply, a decision point adds the *purpose* for each CCIR collection and reporting requirement *task*.

Joint Doctrine Adjustments. Joint and other Service-specific doctrine adequately describes the who, what, when, where, and why of CCIRs; however, in practice the definition is ambiguous and leads to misinterpretation on "how" to develop and use CCIRs to enable timely and effective decisionmaking.<sup>22</sup> These misinterpretations lead staffs to create CCIRs untied to decision points. Recommendation 1: Joint doctrine should provide greater clarity on how to

develop and used CCIRs tied to decision points because of the central role CCIRs have in enabling the commander's decisionmaking process.

There is also uncertainty on how CCIRs are written; for example, are they written as a question or a statement? This uncertainty is currently mitigated by commanders involving themselves in the development of CCIRs and by staffs knowing how their commander prefers to receive information. Recommendation 2: In future versions of joint doctrine, adding written examples of PIRs and FFIRs would provide joint officers a doctrinal starting point for writing and developing CCIRs. Additionally, by illustrating in joint doctrine how CCIRs are linked to one or more decision points, staffs will increase their understanding of CCIRs across echelon, which will enable better synchronization of joint operations.

When reviewing the evolution of CCIR in joint and Service doctrine, nearly every alteration in the development of CCIRs was revised from lessons learned following large-scale conventional operations. U.S. military experiences from stability, peacekeeping, and counterinsurgency operations have not influenced CCIR development in doctrine.<sup>23</sup> The breadth of activities involved in low-intensity operations over the past two decades has clouded staff planning and execution, leading staffs to struggle with the development of CCIRs tied to decision points. Recommendation 3: Although decisionmaking generally happens at a slower pace during low-intensity operations, doctrine should emphasize that CCIRs are an important tool to enhance understanding and enable decisionmaking across the competition continuum.

#### Conclusion

Joint force commanders face a highly complex and challenging task. Decisions at the operational level are substantially different in time and space, and the volume of information received from modern mission command systems has the potential to overburden a staff and delay decisionmaking. Faced with global competition in every

domain, senior leaders in the U.S. military increasingly desire innovative technologies that will enable decision dominance and overmatch to win the next fight.24 However, for the commander to provide timely and valuable direction and guidance, he or she must have good information to consider and interpret. CCIRs are designed specifically to combat these challenges and prevent decisionmaking paralysis. When optimized, CCIRs become a critical factor that prioritizes the information a commander needs to make decisions, thereby enabling joint synchronization and aligning the JTF, across all domains, to achieve mission success.

In planning and execution, CCIRs should prioritize resources and assigned tasks throughout the JTF—particularly with JISR assets. Understanding the enemy, the environment, and friendly forces allows the commander to apply his or her creativeness and judgment while synchronizing subordinate capabilities and resources to best accomplish objectives. The combined effect of PIRs and FFIRs enables the commander to understand the capability and status of his or her own forces as well as those of the enemy and the OE. When combined with HNIRs, prioritizing resources to collect and analyze critical information requirements enhances the commander's ability to provide better direction and guidance and increases the quality of operational assessments to support operations across all three planning horizons.<sup>25</sup>

Cross-functional headquarters integration in the development of CCIRs is essential, but the most important person in this process remains the commander. To mitigate observed misunderstandings on the development and use of CCIRs, commander involvement is critical, and his or her staff needs to be aware of how the commander prefers to receive information. The creation of CCIRs tied to decision points directly supports an improved ICP, creates better anticipation throughout the JTF, facilitates the creation of branch plans and sequels, and increases the confidence of commanders when decision points are reached. Developing CCIRs by

backward-planning off an anticipated decision point provides a jumpstart for the staff to develop decision support tools. These tools then assist in driving the commander's decisionmaking process and enhance the utility of required planning products to enable joint synchronization. JFQ

#### Notes

- <sup>1</sup>Mark A. Milley, speech at Dwight David Eisenhower Luncheon, video, 1:27:02, Association of the U.S. Army, Arlington, VA, October 4, 2016, https://www.dvidshub.net/video/485996/ausa-2016-dwight-davideisenhower-luncheon.
- <sup>2</sup> FY21.1 Mission Command Training in Large-Scale Combat Operations: Key Observations (Fort Leavenworth, KS: Center for Army Lessons Learned, Mission Command Training Program, 2021), 14, https://usacac.army.mil/sites/default/files/publications/FY21\_MCTP. pdf; U.S. Army Combined Arms Center Headquarters, WFX 16-4 CJTF/CJFLCC Initial Impression Report (Fort Leavenworth, KS: Center for Army Lessons Learned, 2016); Milton Hileman, JFLCC/OSD Bilateral Command Post Exercise Report (Fort Leavenworth, KS: Center for Army Lessons Learned, 2015).
- <sup>3</sup> Michael R. Barefield, Commander's Critical Information Requirements (CCIR): Reality Versus Perception (Fort Leavenworth, KS: School of Advanced Military Studies, 1993), 29.
- <sup>4</sup> Joint Publication (JP) 5-0, *Joint Plan-ning* (Washington, DC: The Joint Staff, 2017), V-14.
- <sup>5</sup> Barefield, Commander's Critical Information Requirements, 33–34; Field Manual 101-5, Command and Control for Commanders and Staff, final draft (Washington, DC: Headquarters Department of the Army, 1993), 0-3.
  - <sup>6</sup> JP 5-0, V-15.
- <sup>7</sup> Scott Berrier, interview by Michael Morell, *Intelligence Matters* (CBS), podcast audio, 34:34, with transcript, November 17, 2021, https://www.cbsnews.com/news/china-russia-threats-scott-berrier-intelligence-matters-podcast/?msclkid=725beffec55711ecbfa5bcbee206b1 0e. Emphasis added.
  - <sup>8</sup> JP 5-0, V-15.
- <sup>9</sup> Training Division, Joint Staff J7, Commander's Critical Information Requirements (CCIR): Insights and Best Practices Focus Paper, 4<sup>th</sup> ed. (Suffolk, VA: The Joint Staff, January 2020), 3, https://www.jcs.mil/Portals/36/Documents/Doctrine/fp/ccir\_fp4th\_ed.pdf.
- <sup>10</sup> Marc A. Spinuzzi, CCIR for Complex and Uncertain Environments (Fort Leavenworth, KS: School of Advanced Military Studies, 2007), 43.

- <sup>11</sup> Christopher Larsen, "Commander's Critical Information: What the Leader Needs to Know, and Needs to Hide," *War Nerds*, March 10, 2011.
- <sup>12</sup> Personal observations are drawn from our experience as advisors observing North Atlantic Treaty Organization (NATO) operational-level command post exercises Steadfast Jupiter-Jackal 20, Steadfast Jupiter 21, and Steadfast Jackal 2021; Training Division, Joint Staff J7, Commander's Critical Information Requirements, 4th ed.; and FY21.1 Mission Command Training in Large-Scale Combat Operations.
- <sup>13</sup> Training Division, Joint Staff J7, Commander's Critical Information Requirements, 4<sup>th</sup> ed., 14.
- <sup>14</sup> JP 2-0, *Joint Intelligence* (Washington, DC: The Joint Staff, 2013), IV-8.
- <sup>15</sup> JP 2-01, *Joint and National Intelligence Support to Military Operations* (Washington, DC: The Joint Staff, 2017), III-1.
- <sup>16</sup> Personal observations are drawn from our experience as advisors observing NATO operational-level command post exercises, as well as experience working in combatant command and maritime component intelligence staffs. Training Division, Joint Staff J7, Intelligence Operations: Insights and Best Practices Focus Paper, 3<sup>rd</sup> ed. (Suffolk, VA: The Joint Staff, September 2019), https://www.jcs.mil/Portals/36/Documents/Doctrine/fp/intell\_ops\_fp.pdf.
  - <sup>17</sup> JP 2-01, III-21.
- <sup>18</sup> Deployable Training Division, Joint Staff J7, Commander's Critical Information Requirements, 4<sup>th</sup> ed., 4.
- <sup>19</sup> Deployable Training Division, Joint Staff J7, Intelligence Operations, 3<sup>rd</sup> ed., 7.
- <sup>20</sup> Deployable Training Division, Joint Staff J7, Commander's Critical Information Requirements, 4th ed., 6; Training Division, Joint Staff J7, Assessment and Risk: Insights and Best Practices Focus Paper, 3td ed. (Suffolk, VA: The Joint Staff, January 2020), 4.
  - <sup>21</sup> JP 5-0, V-14.
- <sup>22</sup> John R. Sutherland, *Win, Lose, or Draw: CCIR and the Commander's Role in Building Shared Vision* (Fort Leavenworth, KS: School of Advanced Military Studies, 1999), 20–25.
- <sup>23</sup> Spinuzzi, CCIR for Complex and Uncertain Environments, 38.
- <sup>24</sup> Mark A. Milley, "Hearing to Receive Testimony on the Department of Defense Budget Posture in Review of the Defense Authorization Request for Fiscal Year 2023 and the Future Years Defense Program," Senate Armed Services Committee, 117<sup>th</sup> Cong., 2<sup>nd</sup> sess., April 7, 2022, 8, https://www.armed-services. senate.gov/imo/media/doc/22-26\_04-07-2022.pdf.
- <sup>25</sup> Deployable Training Division, Joint Staff J7, Commander's Critical Information Requirements, 4<sup>th</sup> ed., 4.