



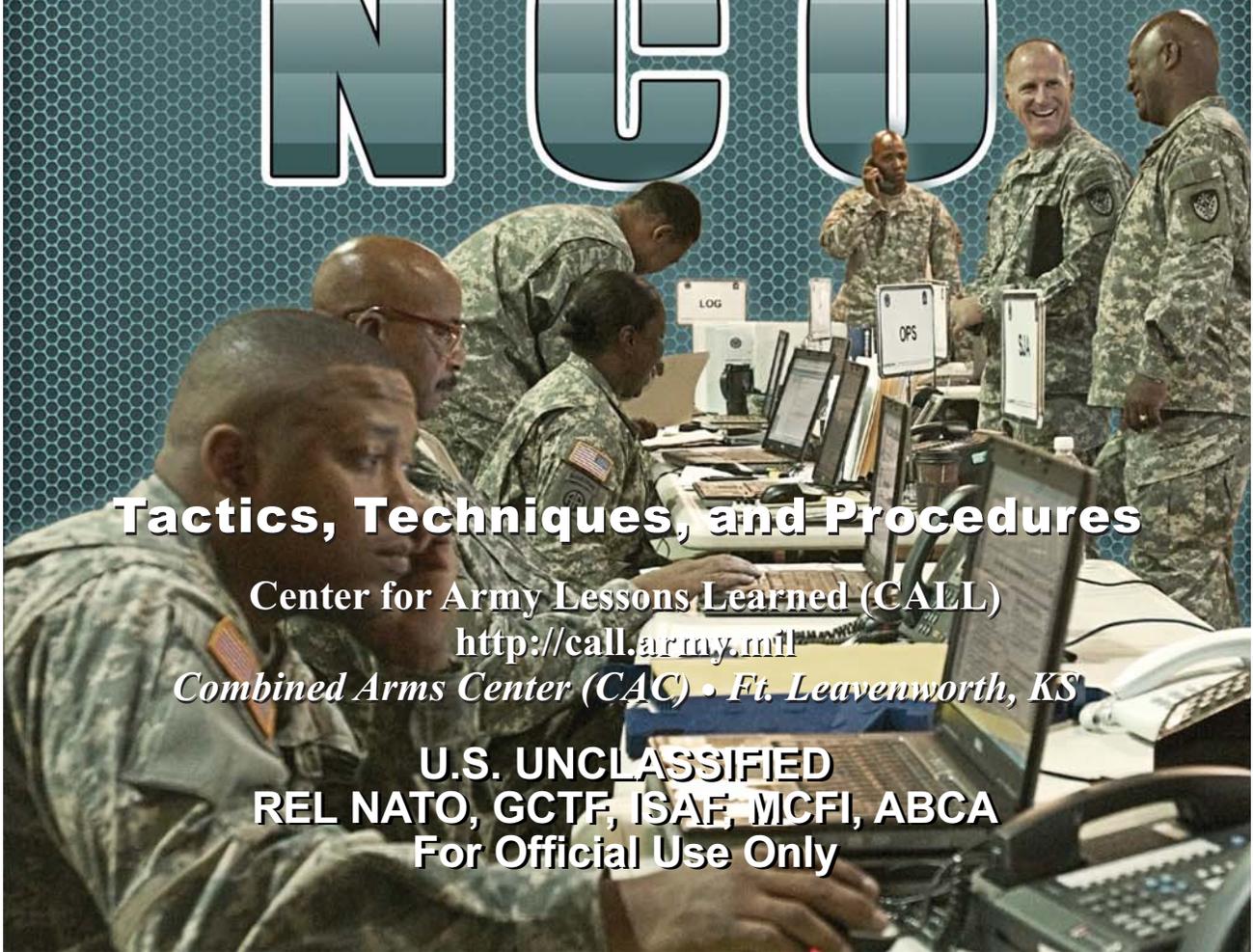
# HANDBOOK

No. 08-15

Mar 08



# BATTLE STAFF NCO



**Tactics, Techniques, and Procedures**

Center for Army Lessons Learned (CALL)

<http://call.army.mil>

*Combined Arms Center (CAC) • Ft. Leavenworth, KS*

**U.S. UNCLASSIFIED  
REL NATO, GCTF, ISAF, MCFI, ABCA  
For Official Use Only**

## **Handling Instructions for CALL Electronic Media and Paper Products**

Center for Army Lessons Learned (CALL) authorizes official use of this CALL product for operational and institutional purposes that contribute to the overall success of U.S., coalition, and allied efforts.

The information contained in this product reflects the actions of units in the field and may not necessarily be approved U.S. Army policy or doctrine.

This product is designed for official use by U.S., coalition, and allied personnel and cannot be released to the public without the expressed written consent of CALL. This product has been furnished with the expressed understanding that it will be used for official defense-related purposes only and that it will be afforded the same degree of protection that the U.S. affords information marked "U.S. UNCLASSIFIED, For Official Use Only [FOUO]" in accordance with U.S. Army Regulation (AR) 380-5, section 5-2.

Official military and civil service/government personnel, to include all coalition and allied partners may paraphrase; quote; or use sentences, phrases, and paragraphs for integration into official products or research. However, integration of CALL "U.S. UNCLASSIFIED, For Official Use Only [FOUO]" information into official products or research renders them FOUO, and they must be maintained and controlled within official channels and cannot be released to the public without the expressed written consent of CALL.

This product may be placed on protected UNCLASSIFIED intranets within military organizations or units, provided that access is restricted through user ID and password or other authentication means to ensure that only properly accredited military and government officials have access to these products.

Regulations strictly forbid posting CALL "U.S. UNCLASSIFIED, For Official Use Only [FOUO]" documents to Department of Defense (DOD) Websites that do not restrict access to authorized personnel. AR-25-1, 15 Jul 2005, Army Knowledge Management and Information Technology, paragraph 6-4 n (2) (b) and DOD Web Site Administration Policy and Procedures (11 Jan 2002), Part II, paragraph 3.6.1 require appropriate mechanisms to protect sensitive information.

When no longer needed, all CALL "U.S. UNCLASSIFIED, For Official Use Only [FOUO]" paper products and electronic media will be shredded or destroyed using approved paper shredders or CDROM destroyers.

To allied and coalition personnel:

This information is furnished with the understanding that it is to be used for defense purposes only, that it is to be afforded essentially the same degree of security protection as such information is afforded by the United States, and that it is not to be revealed to another country or international organization without the written consent of CALL.



## Foreword

Demands to produce timely and instructive staff products continue to increase exponentially. Full-spectrum warfare presents many challenges for the brigade combat team (BCT) and battalion-level staffs. Battle staffs must plan for and conduct multiple military operations simultaneously in their respective areas of operation. On any given day, units may be conducting stability operations in one sector, while engaging in small-unit fights in another.

Key imperatives addressed in this handbook complement those outlined in Field Manual 3-24, *Counterinsurgency*:

- Manage information and expectations (battle tracking).
- Learn and adapt (flexibility).
- Empower the lowest levels (centralized planning/decentralized execution).

The role of the battle staff is a critical component to achieve mission success in a counterinsurgency environment. Battle staff noncommissioned officers (NCOs) perform a multitude of vitally important roles and functions in the tactical operations centers and command posts. They are the principal managers of battle tracking, which supports the timely analysis and processing of plans and orders, and they continually adapt these plans and orders to counter the threat. This handbook highlights the important roles that battle staff NCOs fulfill in BCT and battalion-level staffs and defines their key roles and responsibilities. The purpose of this handbook is to offer rehearsal techniques and troop-leading procedures as well as useful tactics, techniques, and procedures to maintain and improve battle staff efficiency.

**DAVID M. BRUNER**  
CSM, USA  
Army Training and Doctrine Command



<b>Battle Staff NCO Handbook</b>	
<b>Table of Contents</b>	
<b>Introduction</b>	<b>1</b>
<b>Chapter 1. Battle Staff Noncommissioned Officers in the Tactical Operations Center/Command Post</b>	<b>5</b>
<b>Chapter 2. Roles and Functions of Battle Staff Noncommissioned Officers</b>	<b>21</b>
<b>Chapter 3. Battle Staff Rehearsals</b>	<b>41</b>
<b>Chapter 4. Troop-Leading Procedures for Battle Staff Noncommissioned Officers</b>	<b>55</b>
<b>Chapter 5. After-Action Review</b>	<b>59</b>
<b>Appendix A. Battle Tracking Enablers</b>	<b>63</b>
<b>Appendix B. References</b>	<b>71</b>

<b>Center for Army Lessons Learned</b>	
<b>Director</b>	<b>Colonel Steven Mains</b>
<b>Managing Editor</b>	<b>George J. Mordica II</b>
<b>Project Analyst</b>	<b>Ralph Nichols</b>
<b>CTC Analyst</b>	<b>Gordie Davidson</b>
<b>Contributing Authors</b>	<b>CSM of the U.S. Army (USA, Ret) Jack Hardwick CSM Jeff Horne SGM (USA, Ret) Patrick Castin SGM Douglas Droesch MSG Steven Vigil MSG (USA, Ret) Robert Shoemaker David Nelson</b>
<b>Publication Production Coordinator</b>	<b>Valerie Tystad</b>
<b>Editor</b>	<b>Jenny Solon</b>
<b>Graphic Artist</b>	<b>Dan Neal</b>
<b>Printing Support Liaison</b>	<b>Carrie Harrod</b>

## **CENTER FOR ARMY LESSONS LEARNED**

---

The Secretary of the Army has determined that the publication of this periodical is necessary in the transaction of the public business as required by law of the Department.

Unless otherwise stated, whenever the masculine or feminine gender is used, both are intended.

**Note:** Any publications (other than CALL publications) referenced in this product, such as ARs, FMs, and TMs, must be obtained through your pinpoint distribution system.

## **Introduction**

**"Command post (CP) personnel must be able to visualize from radio traffic what is going on, what is likely to occur, what is needed, what must be done, and then have the intelligence, imagination, and initiative to do what is necessary . . . Personnel assigned to the CP must be selected with care. Competent, experienced, mature, intelligent captains and sergeants should comprise the bulk of the CP."**

**–Commander, 1st Brigade, 1st Infantry Division, South Vietnam**

The advice from this battle-experienced commander is no less relevant today in Iraq and Afghanistan. Battle staffs working in CPs must remain adaptive and proactive in the operational environment (OE) to effectively predict events, engage the threat, and protect friendly forces. Battle staffs predict events to defeat the enemies' systems and networks. The battle staff noncommissioned officer (NCO) plays an important role in this process.

An effective battle staff must integrate information from one staff section to another and strive to avoid a stovepipe view of the ongoing fight. There must be a mindset of finding and killing both lethal and nonlethal targets. The battle staff must act immediately on information received from the field as actionable intelligence. The S3 staff leverages assets to execute the fight in accordance with the commander's intent.

Battle staff-related trends from the combat training centers (CTCs) indicate the following:

- Lack of qualified battle staff NCOs.
- Improper use of NCOs in a tactical operations center (TOC)/CP at brigade/battalion levels.
- Ineffective battle tracking and critical information processing (weakening the ability of friendly forces to achieve and maintain information superiority).
- Poor execution instructions (i.e., lack of clear guidance in plans and orders, which reduces the effectiveness of tactical-level application and execution of the commander's intent).
- Weak application of intelligence preparation of the battlefield (IPB).

## **Definitions**

### **Battle tracking**

Battle tracking includes monitoring the current location, activity, and combat power of task force elements; monitoring the progress of adjacent and supporting units; and updating templates. The battle staff processes all reports and information entering the CP and maintains and monitors:

- Situation maps.
- Adjacent unit and joint, interagency, intergovernmental, and multinational activities.
- Status charts.
- Emerging enemy tactics, techniques, and procedures.

The battle staff captain coordinates battle-tracking activities for all CP sections.

### **Information management**

Information management includes defining the tactical problem; understanding requirements, capabilities, and shortfalls, both current and future; providing feasible options; and recognizing the time for decision(s). The eight steps to managing information are as follows:

1. Receive information.
2. Record and post information.
3. Understand the information.
4. Process information.
5. Analyze information.
6. Disseminate information.
7. Safeguard information.
8. Follow up.

### **Information superiority**

The doctrinal (Field Manual 3-0, *Operations*) keys to achieving information superiority are the following:

- Develop and maintain a comprehensive picture of enemies and adversaries; forecast their likely actions.
- Deny enemies and adversaries information about friendly forces and operations.
- Influence enemy and adversary leader perceptions, plans, actions, and will to oppose friendly forces.
- Influence noncombatants and neutrals to support friendly missions or not to resist friendly activities (through an effective information operations campaign plan and execution down to the tactical level).

- Inform noncombatant and neutral organizations so they can better support friendly policies, activities, and intentions.
- Protect friendly decision-making processes, information, and information systems.
- Continually provide relevant information (including intelligence) to the commander and staff in a useable form.
- Destroy, degrade, disrupt, deny, deceive, and exploit enemy decision-making processes, information, and information systems and influence those of adversaries and others.

### **Execution instructions**

Execution instructions articulate the commander's decisions to subordinates, allocate resources to subordinates, and develop technical and tactical instructions to implement the commander's vision.

### **Intelligence preparation of the battlefield (IPB)**

The main elements of IPB include:

- Define the OE.
- Describe the environmental effects.
- Evaluate the threat.
- Determine threat courses of action (COAs).

### **Battle Staff Training and Effectiveness**

To enhance battle staff training and effectiveness and improve performance at the combat training centers, units should conduct predeployment training that encompasses the following:

- Doctrinally precise tasks and conditions.
- Doctrine-based scope and task organization.
- Centralized planning and control in response to enemy actions.
- Doctrine-based opposing forces.
- Top-down intelligence direction and products.
- Detailed planning and preparation for a discrete, short duration.
- Standardized performance of the battle staff process, procedures, and products as measures of effectiveness.

## **CENTER FOR ARMY LESSONS LEARNED**

---

Battle staffs must continually adapt against the challenges of a clever, innovative enemy. They must leverage and manage information and expectations via a continuous, effective planning and targeting cycle to attain information superiority. If these staff challenges are successfully achieved, then battalion- and brigade-level staffs can help bring all available combat assets to bear more effectively in the current counterinsurgency fight and in other types of military operations in the full range of conflict. An effective functioning battle staff, supported by NCOs who “make it happen,” greatly enhances mission success on the battlefield.

This handbook offers a prescriptive method to assist battle staff NCOs in understanding their roles and functions as members of battalion and brigade staffs.

## Chapter 1

### Battle Staff Noncommissioned Officers in the Tactical Operations Center/Command Post

The tactical operations center (TOC)/command post (CP) cannot run effectively without technically and tactically proficient battle staff noncommissioned officers (NCOs). NCOs working in the TOC/CP should have a firm grasp on what their particular roles and responsibilities are within their assigned warfighting functional (WFF) areas, and understand how these roles relate to others in the TOC/CP (i.e., how they fit into the big picture).

Battle staff NCOs must take an active part in the planning and execution of all types of military operations. Senior NCOs on the battle staff are required to mentor, develop, and train young Soldiers and new NCOs in the individual and collective tasks associated with TOC/CP operations. If possible, personnel filling critical, higher-level (E-7 and above) NCO positions should be graduates of the Battle Staff NCO Course taught at the United States Army Sergeants Major Academy.

Below is a general overview of the key roles and responsibilities of some of the principal members of a battle staff. The key NCO duties and responsibilities are examples of what are typically required for brigade combat team (BCT) and battalion-level staffs. Chapter 2 examines specific duties of battle staff NCOs.

#### Officers

While the focus of this handbook is centered on battle staff NCOs, the role of commissioned officers must be briefly mentioned. The officer's role within the CP is primarily one of "seeing the battlefield." Battle staff officers assess the tactical situation, anticipate the enemy's intent, and determine the long- and short-term impact of friendly actions. Battle captains and other commissioned officers on the staff issue instructions in accordance with the commander's guidance and develop estimates and plans using the military decision-making process (MDMP). Officers should maintain a wide view of operations. They should not routinely post the operations map, work digital command and control (C2) systems, or answer telephones. These roles should be fulfilled by battle staff NCOs.

#### Command Sergeant Major (CSM)

**"CSMs need to understand the concept of battle circulation and its overall impact on the command. He is the commander's additional set of eyes and ears. He must understand not only the plan but also the commander's intent. That is the only way he can translate both into troubleshooting events or systems."**

**–CSM Angel Febles, Joint Readiness Training Center Operations Group**

The unit CSM actively participates in the selection and retention of qualified NCOs for TOC/CP operations. The CSM must rigorously enforce the use of available TOC/CP training courses by ensuring allocations are available and the right personnel attend. He participates in developing and implementing enlisted training

and enlisted Soldiers' tasks based on the unit mission essential task list (METL) and battle focus. The CSM monitors TOC/CP operations and NCO participation to ensure that everyone properly accomplishes their specific duties. He must actively mentor NCOs about their TOC/CP responsibilities and training.

### **Operations Sergeant Major (SGM)**

The operations SGM supervises the staff on the control of the tactical command post (TAC CP) and the TOC. During tactical operations, the SGM remains with the TAC CP until the TOC jumps to a new location. SGM duties and responsibilities include, but are not limited to, the following:

- Ensure proper accountability and maintenance of equipment and vehicles.
- Supervise precombat inspections (PCI) and precombat checks (PCC).
- Deploy with the assault element during tactical jumps.
- Monitor and supervise the distribution of messages and operational overlays (analog/digital) one organizational level up and two levels down.
- Coordinate and brief displacement (jump TOC) procedures including tear down, setup, and quartering party activities, and be responsible for the physical setup, arrangement, and breakdown of the main CP.
- Ensure accurate setup of TAC CP and all supporting vehicles to approved configuration.
- Supervise control over both the exterior and interior organization of the TOC to include personnel, vehicles, and tents.
- Leverage biometric capabilities to validate identity of authorized visitors to the TOC/CP.
- Supervise the TOC security plan and develop specific security programs such as threat awareness and operational security (OPSEC).
- Responsible for staff training:
  - Ensures qualified Soldiers/NCOs attend the Battle Staff NCO Course or schools that benefit Soldiers and their WFF groups.
  - Ensures a training and validation training program is developed to keep NCOs proficient and current on staff operations and procedures.
  - Ensures Soldiers receive digital systems training and digital gunnery training.
  - Ensures Soldiers are cross-trained.
- Assist the battle captain with rehearsals and executing battle drills.

- Give guidance and supervise the construction of the terrain board model during planning phases.
- Ensure all information within the TOC (coming and going) is disseminated, updated, collaborated, and managed properly.
- Monitor situations and ensure TOC maintains communications with attached, subordinate, adjacent units, and higher headquarters.
- Manage reports/battle tracking.
- Oversee the timely and accurate posting of graphics and overlays.
- Supervise fragmentary order (FRAGO) control (accountability) and distribution.
- Ensure TOC personnel annotate logistics reports in appropriate journal files.
- Ensure TOC personnel act on all requests for information (RFIs).
- Ensure TOC personnel continually update significant activities (SIGACTS).
- Maintain status boards/charts.
- Ensure TOC maintains battle rhythm by the following actions:
  - Supervises and ensures the TOC rehearses commander's update briefings (battlefield update brief) and allocates time for staff and the WFF chiefs to prepare and brief the commander and staff.
  - Monitors and ensures all staff sections/WFF follow the time schedule for rehearsals.
  - Monitors and checks to see if all WFF chiefs/noncommissioned officers in charge (NCOICs) turn in their briefing slides at the appropriate time.
  - Monitors staff rehearsals, mainly ensuring everyone is present.
- Coordinate, synchronize, and integrate internal CP and separate cell activities.
- Serve as chief advisor to the executive officer (XO) and S3 concerning main CP operations during planning, preparation, and execution.
- Participate in CP site selection, reconnaissance, and movement and cell coordination.
- Know all electronic/computer tracking systems and communication systems in use and ensure operators are fully trained.

## **CENTER FOR ARMY LESSONS LEARNED**

- Ensure system of resupply for expendable items.
- Coordinate repair or replacement of computer hardware/software.
- Responsible for TOC/CP life support (food, water, rest periods, duty rosters).

### **S3 NCOIC**

The S3 NCOIC works directly for the operations SGM and assumes his duties in his absence. His duties encompass a wide range of responsibilities and activities within the CP. He oversees the following TOC functions: receives, distributes, and analyzes information; makes recommendations; and integrates and synchronizes resources. The duties and responsibilities of the S3 NCOIC include the following:

- Supervise the daily operations and enforce standing operating procedures (SOPs).
- Train enlisted personnel.
- Monitor and train NCOs prior to their attendance at the Battle Staff NCO Course (set them up for success).
- Ensure proper distribution of reports and messages throughout the CP.
- Supervise maintenance and administration of the TOC/CP in conjunction with the OIC/SGM.
- Coordinate with the first sergeant and company XO for maintenance and logistics package support.
- Ensure personnel properly service and maintain all equipment systems (vehicles, radios, generators, etc.).
- Supervise TOC/CP personnel in setup/teardown and displacement.
- Supervise physical layout of main CP vehicles, extensions, briefing tents, sleep tents, and antennas.
- Recommend selection of alternate CP locations/configurations.
- Enforce security plan.
- Inspect section fighting positions/range cards. If there are attachments (e.g., infantry section or Bradley fighting vehicle support), coordinate local security and ensure inspection is being accomplished. Coordinate guard/entry control point personnel with each staff section.
- Conduct OPSEC vulnerability assessment.
- Collect and consolidate schedules for current operations personnel.
- Collect and battle track unit status report information.

- Monitor situations and ensure personnel maintain communications with attached personnel.
- Map all graphics and overlays; ensure operations section maintains situational awareness of unit locations one level up and two levels down.
- Control and distribute FRAGOs.
- Log information in journal files.
- Assist in answering RFIs.
- Update SIGACTS.
- Assist in the MDMP.
- Prepare main CP for orders, drills, briefs, and rehearsals.
- Assist in coordinating and preparing rehearsals.
- Account for terrain board and equipment, and supervise setting up terrain board.
- Ensure all communications are operational (know all communications systems used by the operations section and ensure all are functional).
- Establish and maintain an effective battle rhythm to ensure the higher headquarters receives the required reports.
- Know all software and programs in use by the operations section.
- Ensure section sleep plans and shift schedules are posted and working properly.

### **Battle Staff NCO**

The battle staff NCO and battle captain must work together and understand each other's roles and responsibilities. To successfully conduct his duties and responsibilities, the battle staff NCO must have access to and an understanding of the current operations plan (OPLAN), operations order (OPORD), and FRAGOs issued by his unit and his higher headquarters. He must maintain current battle execution synchronization matrices, execution checklists, execution matrices, operation schedules, and the overall common operational picture (COP) to effectively battle track current operations. He is the first-line information manager. The battle staff NCO must understand everything about the commander's critical information requirements (CCIR). He should have a good working knowledge of the current situation. He must keep the battle captain out of trouble. An overview of the duties and responsibilities of the battle staff NCO include the following:

- Supervise TOC information flow.
- Collect, process, and disseminate information.

- Oversee quality control of battle tracking.
- Ensure the TOC can operate continuously while static or mobile.
- Monitor current operations.
- Ensure TOC personnel distribute reports and messages properly.
- Update unit status reports.
- Manage shift schedules to ensure sleep plans and meals are properly scheduled.
- Maintain staff journals and filing records (analog or digital) of all staff decisions and critical information coming into and leaving the CP.
- Maintain and update graphic control measures.
- Support the commander's update brief.

### **TOC/CP Operational Tactics, Techniques, and Procedures (TTP)**

An effective TOC/CP demands special TTP to function effectively in the field. The TOC/CP has two primary functions:

- To track Soldiers and equipment during the battle to assist the leader in the command and control of the unit.
- To serve as a data center that processes enemy and friendly information.

The basic building blocks for any TOC/CP are:

- Internal work area
- Physical setup
- Personnel who make the TOC/CP function

The responsibility of the BCT/battalion operations officer is to assemble these building blocks and make them operate as one.

Ultimately, the success of a TOC/CP depends on its ability to battle track information in any situation, ranging from combat to peacekeeping. Battle tracking is not an easy task. The daily information flow must be carefully managed or it can rapidly overload any headquarters. Knowing what is important, displaying that data, and analyzing the information are equally crucial tasks. Personnel guided by experience can use these simple tracking tools to get the job done. Regardless of its physical size, the TOC/CP must have a system in place to record and display basic message traffic. An effective TOC/CP provides vital battle-tracking information using a centralized COP.

The concept of a COP is simple: provide a situational update at a glance. Anyone should be able to look at the COP and understand what the unit is doing or what it

plans to do without asking a lot of questions. More is not necessarily better for a COP. The charts should not be so busy that they are not functional. Too much information may confuse the viewer. The art is to determine what information is required regularly to determine how data from various sources can be combined effectively into one chart.

### **Predeployment Tips**

#### **Replicate the OIF environment during predeployment training:**

- Configure garrison operations to mirror field CPs in form and function; for example, position the S3 battle captain's desk next to the S2 operations officer rather than separating him in a different office or cubicle.
- Recommend NCOs convert a conference room into a facsimile of their CP using the tactical standing operating procedures (TACSOP), faces, places, systems, and displays to include Secure Internet Protocol Router Network (SIPRNET) connectivity.
- Ensure NCOs participate in the predeployment site survey.

#### **Design realistic and rigorous training:**

- If possible, connect via SIPRNET to the unit's deployment area of operations (AO). This practice enables units to coordinate, fuse intelligence, and conduct rehearsals in their future AOs.
- Recommend battle staffs focus on specific counterinsurgency (COIN) tasks that apply to their operational environment/AO.
- Recommend every Soldier receive culture and language training tailored to his future operational area.
- Battalion and BCT battle staffs should plan and coordinate simultaneous training events and predeployment activities to ensure successful predeployment operations. Major training events include:
  - Organizing for combat.
  - Fielding required equipment.
  - Filling personnel shortages.
  - Developing and submitting an operational needs statement.
  - Conducting equipment maintenance and preparing for deployment.
  - Conducting multi-echelon training.
  - Validating all units for deployment in accordance with Forces Command and Combined Forces Land Component Command predeployment training program/standards.

- Developing the deployment order/OPLAN.
- Developing training timelines.
- Conducting battle staff training.
- Ensuring compliance with the Soldier Readiness Program (SRP).
- Refining battle staff structure and responsibilities.
- Cross training.

### **TOC/CP Operations**

#### **TOC/CP operations tips**

Units and battle staff NCOs can use the following tips to enhance mission accomplishment:

- Keep map boards up to date; do not rely exclusively on digital systems such as Force XXI Battle Command Brigade and Below and Blue Force Tracker.
- Use standard 1:50,000 scale military maps.
- Use smaller or larger maps as additions, not substitutes.
- Place the operations map in the center flanked by the intelligence and fire support maps.
- Create overlays to one standard size.
- Consider combining status charts with situation maps to give commanders friendly and enemy situation snapshots for the planning process.
- Standardize map boards to the same size, scale, and overlay mounting holes. This practice facilitates easy transfer of overlays from one board to another.
- Depict all unit boundaries and current locations of friendly units within the AO.
- Template known and suspected enemy locations.
- Display locations of essential sustainment modes.
- Depict main supply routes.
- To enhance effective battle tracking, recommend battle staffs build the COP as the action occurs to provide the commander relevant information.

- The S2 supervises intelligence preparation of the battlefield (IPB), but the entire staff develops the IPB. The battle staff should continuously review and update its respective “running” estimates.
- Keep tactical orders simple and concise. Maximize the use of matrix OPODs with graphics.
- Adhere to the 1/3 (plan) – 2/3 (execute) rule.
- Factor in mission, enemy, terrain and weather, troops and support available, time available, and civil considerations (METT-TC).
- When occupying a fixed site or conducting a transfer of authority with another unit, conduct a detailed site survey to ensure systems and communications compatibility.
- Ensure the battle captains, battle staff NCOs, radio telephone operators (RTOs), and primary staff officers (at least the S2) can see the same COP from their working stations.
- Recommend battle captains monitor radio traffic from their working stations.
- Ensure communications are compatible with subordinate elements, the supported unit, and higher headquarters.
- Publish primary, alternate, contingency, and emergency communication procedures.
- Provide a mechanism for capturing and sharing SIGACTS.

**"A good battle staff NCO needs to be technically and tactically proficient . . . [He] must also have the desire and drive to learn, as the work environment is fast-paced and demanding. A battle staff position is not for someone with a timid or casual mentality."**

**–SSG Michael Milihram**

### **TOC/CP operations checklist**

Below is an example of a TOC/CP checklist units and battle staff NCOs can use to enhance mission accomplishment. The following list provides only “A Way” and is not all-inclusive:

- Maintain unit battle tracking.
- Monitor civil-military operations (CMO) requesting, tracking, coordinating, and targeting information operations (IO).
- Maintain brigade or battalion/task force (TF) estimate workbook/journal.

## **CENTER FOR ARMY LESSONS LEARNED**

---

- Enforce sleep plan and shift plans/shift chart by name.
- Conduct after-action reviews (AARs) for specific operations, overall issues, and overall team/staff weaknesses and strengths.
- Establish and enforce rules for eating, drinking, sleeping, hot washes, badges, and equipment arrangement.
- Enforce sound, noise, light disciplines.
- Enforce vehicle start schedule and generator fueling and changeover schedules.
- Maintain status boards for each staff section and/or WFF.
- Maintain journal and/or ledger (S3, S2, S5) to track specific information requirements (IR), CCIR, and CMO actions.
- Conduct shift change briefs.
- Ensure adherence to “jump” TOC SOP, equipment, forms, and references available.
- Maintain SIGACTS.
- Maintain situation maps (operations, intelligence, and fire support/fire direction).
- Supervise preventive maintenance checks and services for assigned vehicles, generators, radios, weapons.
- Ensure adherence to casualty evacuation and personnel recovery procedures.
- Maintain battle roster of battalion/TF and any attachments.
- Assist with publication of warning orders/FRAGOs.
- Pre-format blank orders.
- Conduct frequency changeover and signal operating instructions.
- Maintain defense sketches, range cards, and TOC/CP layout diagram.
- Maintain communications and logistics status chart.
- Maintain continuity book (layout, load plan, job description, recurring actions, etc.).
- Conduct immediate action drills.

- Maintain a current SOP.
- Enforce network discipline.

### **Shift change tips**

Information interchanges for the battle staff occur during shift changes. If the shift change briefs are executed effectively, battle tracking continues in a near-seamless transition. The operations SGM is responsible for the shift change and for selecting NCOs for specific shifts. The commander may want several battle update briefs throughout the day. The operations SGM and the battle staff NCOIC ensure briefing areas and shift change personnel are present for the shift change.

Key shift change considerations include the following:

- Dedicate a briefing area.
- Ensure all incoming shift NCOs are present.
- Identify a recorder.
- Submit information slides to the battle captain in a timely manner.
- Account for all slice elements.
- Ensure CSM and operations SGM have a portion of the brief. Recommend the operations SGM talk about security, reporting procedures, TOC organization, information management issues, resupply operations, and maintenance.
- Ensure all slice element NCOs conduct an internal shift change brief.
- Establish criteria to wake senior leaders when their presence is required.
- Establish a plan to update senior leaders after rest periods.
- Include a sleep plan in the METT-TC analysis, and post sleep plans in the CP.

**TOC/CP Shift Change Brief Format – “A Way”**

<b>Event</b>	<b>Description</b>	<b>Briefer</b>
<b>Roll Call</b>	<b>The following personnel are present for the shift change briefing: battle captain, battle staff NCOIC, senior watch officer, S2, S3, S3-Air, fire support officer, S1, S4, S6</b>	<b>Battle Captain</b>
<b>Weather and Intelligence Update</b>	<ul style="list-style-type: none"> <li>• <b>Weather conditions impacting operations during the next 24 hours</b></li> <li>• <b>SIGACTS</b></li> <li>• <b>Threat assessment - priority intelligence requirement (PIR) review</b></li> <li>• <b>Enemy course(s) of action</b></li> <li>• <b>Force protection assessment</b></li> </ul>	<b>S2</b>
<b>Current Operations</b>	<ul style="list-style-type: none"> <li>• <b>Task, purpose, and location for maneuver force in AO</b></li> <li>• <b>Current missions</b></li> <li>• <b>Pending missions during the shift</b></li> <li>• <b>Very important person schedule</b></li> </ul>	<b>S3</b>
<b>Aviation Operations</b>	<ul style="list-style-type: none"> <li>• <b>Focus of deliberate operations planning</b></li> <li>• <b>Active on-call airspace control measures</b></li> <li>• <b>Convoy escort (force protection) mission(s) status</b></li> <li>• <b>Close air support schedule and availability</b></li> <li>• <b>Aircraft status</b></li> </ul>	<b>S3-Air</b>
<b>Fires</b>	<ul style="list-style-type: none"> <li>• <b>Lethal and nonlethal targeting impacting operations</b></li> <li>• <b>Active fire support control measures</b></li> </ul>	<b>FSO</b>
<b>Signal</b>	<p><b>Brief by exception:</b></p> <ul style="list-style-type: none"> <li>• <b>Communication security/frequency changes</b></li> <li>• <b>Service interruption, maintenance</b></li> <li>• <b>Servicing requirements that impact mission</b></li> </ul>	<b>S6</b>
<b>Sustainment</b>	<p><b>Brief by exception:</b></p> <ul style="list-style-type: none"> <li>• <b>Changes to army, fuel, fix that will impact ongoing operations</b></li> <li>• <b>Changes to material that will impact ongoing operations</b></li> </ul>	<b>S4</b>

<b>Personnel</b>	<b>Brief by exception:</b> <ul style="list-style-type: none"> <li>• <b>Manning</b></li> <li>• <b>Public affairs officer</b></li> <li>• <b>Medical</b></li> <li>• <b>Administrative requirements that may impact ongoing operations</b></li> </ul>	<b>S1</b>
<b>Command</b>	<ul style="list-style-type: none"> <li>• <b>CCIR review</b></li> <li>• <b>Location of the commander</b></li> <li>• <b>Overall risk assessment</b></li> </ul>	<b>Battle Captain</b>
<b>Administrative</b>	<b>Administrative requirements that impact the CP</b>	<b>Battle staff NCOIC</b>
<b>Closing</b>	<b>Alibi by exception</b>	<b>Battle Captain</b>

**NCO Shift Change Briefing Format - “A Way”**

The operations SGM ensures that battle staff NCOs conduct their own internal shift change to help facilitate effective information flow/battle tracking in the CP. The outgoing shift briefs the incoming shift in detail. Important areas to cover during the shift change brief include the following:

Current operations:

- Mission
- Commander’s intent
- Concept of operation
- Task organization
- Friendly situation
- Enemy situation
- Unit locations and current SIGACTS
- Personnel status
- Logistics status, to include the TOC/CP
- Combat power status
- Weapons systems status
- Mission-oriented protective posture (MOPP) status
- Air defense artillery status

## **CENTER FOR ARMY LESSONS LEARNED**

- Current fire missions
- Current air missions
- Battle damage assessment during shift
- Attached/detached status (operational control)
- Location of battalion or brigade commander
- Location of the CSM
- Location of the S3/XO
- Location of the operations SGM
- Security/observation post (OP) status
- Guard roster/time schedule

### Future operations:

- Orders/plans to be produced
- Orders due to higher
- Contingency missions
- Planned/anticipated SIGACTS
- Reports last sent
- Actions required by next shift
- Reports due early next shift
- Review staff journal

Shift changes facilitate efficient battle tracking in the TOC/CP, while updating all principal staff members on the COP. The following best practices will help your battle staff achieve and maintain an effective battle rhythm:

- Standardize the agenda.
- Simplify your systems.
- All primary staff members should have representation at the shift change briefing.
- Brief deliberate battalion/brigade-size operations in detail.
- Shift change should occur for all members of the TOC/CP at the same time.

## **Summary**

This opening chapter highlights the crucial role that battle staff NCOs fulfill in operating a successful TOC/CP. NCOs have always been the U.S. Army's primary trainers, and, as such, they help set and maintain the high standards necessary for efficient battalion and BCT staffs to sustain a unit's battle rhythm and high operational tempo during all types of military operations.



## Chapter 2

### Roles and Functions of Battle Staff Noncommissioned Officers

**"Battle staff NCOs are still combat leaders."**

**–SFC (USA, Ret) Pierre Burkett**

Battle staff noncommissioned officers (NCOs) focus on assisting their respective staff officers and senior NCOs. The entire staff contributes to making and executing timely decisions. Commanders and staffs continually look for opportunities to streamline cumbersome or time-consuming procedures. The following paragraphs, organized by warfighting function (WFF), suggest activities and functions common to all members of a particular staff section. Principal staff officers along with their senior NCOs determine what specific functions are performed within their sections based upon the skill sets of available personnel.

#### **Intelligence (Intel) Function**

The battle staff NCO assists within the intel warfighting functional area with all matters concerning intel readiness, intel tasks, intel synchronization, other intel support, counterintelligence, and support to security programs.

Intel readiness:

- Establish and maintain the proper relationships and procedures with other intel staffs, units, and organizations.
- Before deploying on an operation, coordinate with higher echelons, the S4, and the engineer coordinator (ENCOORD) to identify requirements for geospatial products.
- Prepare the command intel-training plan and integrate intel, counter-intelligence, and enemy/threat considerations into other training plans.

Intel tasks:

- Manage intelligence preparation of the battlefield (IPB), to include integrating the IPB efforts of the rest of the staff and other echelons, and support parallel planning.
- Perform situation development, to include updating the enemy/threat, terrain and weather, and civil considerations portions of the common operating picture (COP).
- Provide indications and warnings support to operations.
- Provide intel support to targeting, to include participating in targeting meetings, developing targets, planning target acquisition, and tracking high-payoff targets (HPTs).

## **CENTER FOR ARMY LESSONS LEARNED**

- Provide intel support to battle damage assessment.
- Provide intel support to force protection.
- Provide intel support to information operations (IO) by integrating intel products into IO planning and integrating IO considerations into the other intel tasks.
- Recommend priority intelligence requirements (PIR).

### Intel synchronization:

- Synchronize intel support to operations and to intelligence, surveillance, and reconnaissance (ISR) integration through close coordination with the commander, chief of staff (COS)/executive officer (XO), S3, and the other staff members.
- Develop and continuously update list of intel gaps.
- Analyze and track commander's critical information requirements (CCIR), PIR, friendly forces information requirements (FFIR), and information requirements (IRs) to develop generic collection tasks and requests for support from higher and adjacent commands.
- Develop the intel synchronization plan.

### Other intel support:

- Provide intel updates, other products, and additional support to ISR integration, the concept of operations, and mission accomplishment.
- Advise the commander so that all collection, production, and dissemination adhere to special security, legal, and regulatory restrictions.
- Facilitate the military-intelligence-unique deconfliction of collection among assigned, attached, and supporting intelligence-collection assets and other collection assets in the area of operations (AO).
- Prepare the intel annex to plans and orders and the intel estimate.
- Coordinate technical control and technical support for military intel assets and units.
- Debrief friendly personnel.
- Identify linguist requirements pertaining to intel support.
- Determine all foreign languages and dialects proficiencies needed for mission accomplishment.
- Coordinate security investigations of local-hire linguists.

### Counterintelligence:

- Coordinate counterintelligence activities.
- Ensure intelligence contingency funds (ICF) and the micro awards program are coordinated for and in place.
- Identify enemy intel collection capabilities, such as efforts targeted against the unit.
- Evaluate enemy intel capabilities as they affect operational security, counter surveillance, signals security, security operations, military deception planning, psychological operations (PSYOP), area security operations, and force protection.

### Support to security programs:

- Supervise the command and personnel security programs.
- Evaluate physical security vulnerabilities.
- Conduct staff planning and supervise the special security office.
- Ensure biometrics systems are in place and functioning properly.
- Ensure all applicable security accreditations are valid and up to date.

### **Maneuver Function**

The battle staff NCO assists within the maneuver functional area with all matters concerning training, operations and plans, force development, and modernization.

### Training:

- Conduct training within the command.
- Assist with the preparation of training guidance.
- Help the S3 develop the unit's mission essential task list (METL).
- Identify training requirements based on the unit METL and training status.
- Determine requirements for and allocation of training resources.
- Organize and conduct internal schools; obtain and allocate quotas for external schools.
- Conduct training inspections, tests, and evaluations.
- Maintain the unit readiness status of each unit in the command.
- Compile training records and reports.

### Operations and plans:

- Prepare, coordinate, authenticate, publish, and distribute command standing operating procedures (SOPs), plans, orders, terrain requirements, and products involving contributions from other staff sections.
- Plan, coordinate, and supervise exercises.
- Participate in targeting meetings.
- Review plans and orders of subordinate units.
- Synchronize tactical operations with all staff sections.
- Ensure necessary combat support requirements are provided when and where required.
- Integrate biometrics capabilities (Biometric Automated Toolset and Handheld Interagency Identity Detection Equipment) into plans and orders to achieve identity dominance in the AO.
- Integrate ISR into the concept of operations.
- Develop the ISR plan annex with rest of the staff.
- Integrate fire support into operations.
- Plan tactical troop movement, including route selection, priority of movement, timing, security, bivouacking, quartering, staging, and preparing movement orders.
- Requisition replacement units.
- Establish criteria for reconstitution operations.
- Coordinate and direct terrain management.
- Determine combat service support (CSS) resource requirements with the S1 and S4.
- Participate in course of action (COA) and decision support template development with the S2 and fire support coordinator (FSCOORD).
- Coordinate with the ENCOORD, S2, S5, and surgeon to establish environmental vulnerability protection levels.
- Recommend general command post (CP) locations.
- Integrate space support, IO with the G7, and fire support into all operations.
- Coordinate with the S1 for civilian personnel involvement in tactical operations.

- Consolidate linguist requirements and establish priorities for using linguists.

### Force development and modernization:

- Process procedures for unit activation, inactivation, establishment, discontinuance, and reorganization.
- Field new weapons and equipment systems.
- Evaluate the organizational structure, functions, and workload of military and civilian personnel to ensure their proper use and requirements.
- Allocate manpower resources to subordinate commands within established ceilings and guidance.
- Develop and revise unit force data for documenting any changes to the modification tables of organization and equipment (MTOE) and modification tables of distribution and allowances (MTDA).
- Record and report data for information, planning and programming, allocation, and justification.
- Conduct formal, on-site manpower and equipment surveys.
- Ensure MTOE and MTDA documents reflect the minimum essential and most economical equipment needed for the assigned mission.
- Determine qualitative and quantitative personnel requirements for new equipment and systems.

### Civil-military (CMO) operations:

- Advise the commander on the effect of civilian populations on military operations.
- Minimize civilian interference with operations to include dislocated civilian operations, curfews, and movement restrictions.
- Advise the commander on legal and moral obligations incurred from the long- and short-term effects of military operations on civilian populations.
- Advise the commander on employing military units that can perform CMO missions.
- Operate a CMO center to maintain liaison with other U.S. governmental agencies, host nation (HN) civil and military authorities, and nongovernmental and international organizations in the AO.
- Coordinate with the FSCOORD on protected targets.

## **CENTER FOR ARMY LESSONS LEARNED**

---

- Plan community relations programs to gain and maintain public understanding and goodwill and to support military operations.
- Coordinate with the staff judge advocate (SJA) about advice to the commander on rules of engagement (ROE)/escalation of force when dealing with civilians in the AO.
- Provide the S2 information gained from civilians in the AO.
- Coordinate with the PSYOP officer on trends in public opinion.
- Coordinate with the surgeon on the military use of civilian medical facilities, materials, and supplies.
- Coordinate with the public affairs officer on supervising public information media under civil control.
- Provide instruction to units, officials (friendly, HN civil, or HN military), and the population on identifying, planning, and implementing programs to support civilian populations and strengthen HN internal defense and development.
- Identify and assist the S6 with coordinating military use of the local information system (INFOSYS).
- Participate in targeting meetings.
- Support human terrain teams.
- Coordinate with the provost marshal to control civilian traffic in the AO.
- Help the S4 coordinate facilities, supplies, and other materiel resources available from the civil sector to support operations.
- Coordinate with the S1 and SJA in establishing off-limits areas and establishments.
- Coordinate civilian claims against the U.S. Government with the SJA.

### Air liaison operations:

- Advise the air liaison officer and staff on employing aerospace assets.
- Operate and maintain the U.S. Air Force (USAF) tactical air direction radio net and USAF air request net.
- Transmit requests for immediate close air support (CAS) and reconnaissance support.
- Transmit advance notification of impending immediate airlift requirements.

- Support liaison between air and missile defense (AMD) units and air control units.
- Plan the simultaneous employment of air and surface fires.
- Coordinate tactical air support missions with the FSCOORD and the appropriate Army airspace command and control (A2C2) element.
- Support the supervision of forward air controllers and the tactical air control party.
- Integrate air support sorties with the Army concept of operations.
- Participate in targeting team meetings.
- Direct CAS missions.
- Provide USAF input into A2C2.

### Aviation coordination:

- Advise the commander and staff on employing aerospace assets.
- Operate and maintain the USAF tactical air direction radio net and USAF air request net.
- Transmit requests for immediate CAS and reconnaissance support.
- Transmit advance notification of impending immediate airlift requirements.
- Act as liaison between AMD units and air control units.
- Plan the simultaneous employment of air and surface fires.
- Coordinate tactical air support missions with the FSCOORD and the appropriate A2C2 element.
- Supervise forward air controllers and the tactical air control party.
- Integrate air support sorties with the Army concept of operations.
- Participate in targeting team meetings.
- Direct CAS missions.
- Provide USAF input into A2C2.

### Sustainment Function

The battle staff NCO assists within the sustainment functional area with all matters concerning human resources support and logistics operations, specifically,

## **CENTER FOR ARMY LESSONS LEARNED**

manning, personnel services, personnel support, headquarters management, logistic plans, supply, maintenance, transportation, and services.

### Manning:

- Analyze personnel strength data to determine current capabilities and project future requirements.
- Monitor unit strength status.
- Support unit linguist requirements through identifying all foreign-language-skilled Soldiers in the organization.
- Advise the commander and staff about individual, team, or crew replacements.
- Coordinate and monitor readiness processing, movement support, and positioning of replacement personnel.
- Receive, account, process, and deliver personnel.
- Prepare estimates for personnel replacement requirements based on estimated casualties, nonbattle losses, and foreseeable administrative losses.
- Prepare plans and policies to govern the assignment of replacement personnel.
- Request and allocate individual, team, or crew replacements.
- Maintain a personnel information database.
- Account for military personnel.
- Collect, process, and store critical information about Soldiers, units, and civilians.
- Account for civilian personnel.

### Personnel services:

- Conduct casualty reporting, notification, and assistance.
- Monitor the reporting and status of remains.
- Manage casualty mail coordination.
- Manage the awards program.
- Manage records, including finance, legal services, and command information.
- Plan and coordinate policies for Soldiers deemed unfit for combat duty.

- Manage line-of-duty investigations, congressional and family inquiries, and special correspondence.
- Manage internal information program.

### Personnel support:

- Manage postal operations.
- Provide support for morale, welfare, and recreation.
- Support band operations.
- Manage all aspects of equal opportunity.
- Manage community and family support activities.
- Coordinate interaction with the Army and Air Force Exchange Service and nonmilitary agencies servicing the command, such as the American Red Cross.

### Headquarters management:

- Manage the organization and administration of the headquarters.
- Recommend manpower allocation.
- Coordinate and supervise movement, internal arrangement, and space allocation.
- Provide administrative support for military and civilian personnel, including leaves, passes, counseling, transfers, awards, and personal affairs.
- Provide information services, including publications, printing, distribution, and Freedom of Information Act material.
- Provide administrative support for non-U.S. forces, foreign nationals, and civilian internees.
- Administrate discipline, law, and order with the provost marshal, including absence without leave (AWOL), desertion, court-martial offenses, punishments, and straggler disposition.

### Logistic operations and plans:

- Develop the logistic plan to support operations.
- Coordinate with the S3 and S1 on equipping replacement personnel and units.
- Coordinate with the support unit commander on the current and future support capability of that unit.

## **CENTER FOR ARMY LESSONS LEARNED**

- Coordinate the selection of main supply routes (MSRs) and logistic support areas with the ENCOORD and forward recommendations to the S3.
- Perform logistic preparation of the battlefield with the support command.
- Recommend policy for collecting and disposing of excess property and salvage.

### Supply:

- Determine supply requirements, except medical, with the support unit commander and the S3.
- Coordinate requisition, acquisition, and supply and equipment storage and materiel records management.
- Recommend CSS priorities and controlled supply rates (CSRs).
- Calculate and recommend to the S3 basic and prescribed loads, and assist the S3 in determining required supply rates (RSRs).
- Coordinate and monitor the collection and distribution of excess, surplus, and salvage supplies and equipment.
- After coordinating with the S2, direct the disposal of captured enemy supplies and equipment.
- Coordinate the allocation of petroleum products to subordinate units.
- Coordinate host nation support with the S5.

### Maintenance:

- Monitor and analyze equipment readiness status.
- Determine maintenance workload requirements with the support command.
- Coordinate equipment recovery and evacuation operations with the support command.

### Transportation:

- Conduct operational and tactical planning to support mode and terminal operations and movement control.
- Plan administrative troop movements with the S3.
- Coordinate transportation assets for other services.
- Coordinate host nation support with the S5.

- Coordinate special transport requirements to move the CP.
- Coordinate with the S1 and the provost marshal on transporting replacement personnel and enemy prisoners of war (EPWs).
- Coordinate with the S3 for CSS of tactical troop movements.

### Services:

- Coordinate the construction of facilities and installations, except for fortifications and signal systems.
- Coordinate field sanitation.
- Coordinate organizational clothing and individual equipment exchange and replacement.
- Coordinate or provide food preparation, water purification, mortuary affairs, aerial delivery, laundry, shower, and clothing/light textile repair.
- Coordinate the transportation, storage, handling, and disposal of hazardous material or hazardous waste.
- Support linguist requirements, to include contracting for, planning, and providing logistic support to contracted linguists.

### **Command, Control, Communications, and Computers (C4) Function**

The battle staff NCO leverages the C4 functional area capabilities to enhance information management and battle tracking within the tactical operations center (TOC)/CP.

### Operations:

- Prepare and maintain command, control, communications, and computers operations (C4OPS) estimates, plans, and orders.
- Monitor and make recommendations on all technical C4OPS activities.
- Assess C4OPS vulnerability and risk management with the S2.
- Recommend C4OPS network priorities for battle command.
- Recommend CP locations based on the information environment.
- Ensure that redundant communications means are planned and available to pass time-sensitive information.
- Recommend command and control (C2)-related essential elements of friendly information.
- Establish automation systems administration procedures for all INFOSYS.

## **CENTER FOR ARMY LESSONS LEARNED**

---

- Manage and control information network capabilities and services.
- Coordinate, plan, and direct all C4OPS support interfaces with joint and multinational forces, including host nation support interfaces.
- Coordinate the availability of commercial INFOSYS and information services for military use with the S5.
- Coordinate, plan, and direct communications protocols and user interfaces from within the global information grid to the tactical Internet for all WFFs.
- Configure wide-area networks.
- Manage radio frequency allocations and assignments and provide spectrum management.
- Coordinate, plan, and direct all command information assurance (IA) activities.
- Direct and supervise information and system security.
- Ensure the appointment of an information assurance security officer (IASO) in all elements of the command.
- Coordinate, plan, and direct communications security (COMSEC) measures, including the operation of the IA systems security office.
- Provide IA direction and guidance to IA security coordinators.

### Information management (IM):

- Prepare, maintain, and update IM estimates, plans, and orders.
- Support command IM program implementation at the tactical and main CPs.
- Facilitate the timely flow of required information (RI), and enable the staff to process, display, store, and disseminate the COP.
- Establish procedures that enable the staff to maintain a timely flow of RI with the staff.
- Establish INFOSYS to develop the COP with the staff.
- Coordinate the staff interaction necessary to develop the COP within CPs and at each major subordinate command.
- Provide the architecture necessary to collect, process, display, store, and disseminate RI to support C2 functions with the staff.
- Facilitate staff presentation of RI according to quality criteria of accuracy, timeliness, usability, completeness, precision, and reliability.

- Coordinate, plan, and direct the establishment of C2-system architectures that provide a sound foundation for current and future IM.
- Direct and supervise automation management functions.
- Establish and provide automation configuration management for all INFOSYS hardware/software employed by the command.
- Coordinate, plan, and direct the use of C2 INFOSYS and automation software and hardware employed by the command.

### **Plans Function**

The battle staff NCO assists within the plans functional area with all matters concerning IO.

- Ensure IO supports achieving information superiority.
- Synchronize and coordinate offensive and defensive IO within the overall operation.
- Assess the effects of offensive and defensive IO throughout the operations process and recommend IO adjustments as required.
- Coordinate and synchronize tactical IO with theater, strategic, and operational-level IO.
- Coordinate IO elements and related activities for the COS/XO.
- Integrate intel from the S2 into IO.
- Monitor execution of IO tasks to ensure delivery of massed information effects when needed.
- Exercise staff coordination over the conduct of the overall IO effort.
- Coordinate the preparation of the IO portions of plans and orders.
- Recommend priorities for accomplishing IO tasks identified during planning.
- Leverage the capabilities of higher echelon IO agencies and units providing connectivity with national and theater-level IO agencies.
- Participate in targeting meetings.
- Recommend IO effects to influence adversary perceptions, decisions, and actions.
- Establish and supervise an IO cell.
- Coordinate IO with other agencies such as the U.S. Information Agency, U.S. Agency for International Development, and U.S. Ambassador.

### **Fires Function**

The battle staff NCO assists within the fires functional area with all matters concerning electronic warfare (EW) and fire support.

EW operations:

- Coordinate, prepare, and maintain the EW target list, electronic attack (EA) taskings, EA requests, and the EW portion of the sensor/attack matrix.
- Coordinate and deconflict EW targets with frequencies and the joint restricted frequency list.
- Coordinate with the FSCOORD and S2 to identify opportunities for conducting effective EA.
- Participate in targeting meetings.
- Analyze adversary EW activities with the S2.
- Assess adversary vulnerabilities, friendly capabilities, and friendly missions in EW terms.
- Develop a prioritized adversary C2 target list based on high-value targets and HPTs with the FSCOORD.
- Develop the EA mission tasking based on the C2 target list, and issue the EA target list.
- Coordinate the EA target list with organic military intelligence units and with adjacent and higher commands, including joint and multinational commands when appropriate.
- Coordinate with the higher headquarters EW officer to deconflict IO on the communications spectrum.
- Prepare EW estimates and the EW appendix to the IO annex to orders and plans.

Fire support operations:

- Develop, with the fire support officer and S3, a concept of fires to support the operation.
- Plan and coordinate essential fire support tasks.
- Integrate nonlethal fires, including offensive IO, into the concept of fires and concept of operations from input at targeting meetings.
- Coordinate positioning of fire support assets.

- Provide information on the status of fire support systems, target acquisition assets, and field artillery ammunition.
- Coordinate and synchronize joint fire support.
- Manage ammunition requirements, resupply, and reallocation.
- Recommend fire support coordinating measures to support current and future operations.
- Recommend and implement the commander's counterfire and other target engagement priorities.

### **Protection Function**

The battle staff NCO assists within the protection functional area with all matters concerning air and missile defense, chemical, engineer, and provost marshal operations.

Air and missile defense operations:

- Provide air and missile attack early warning.
- Disseminate air defense ROE, weapons control status, and air defense warnings to subordinate units.
- Disseminate air tasking order (ATO) and airspace control order (ACO) information to air defense artillery (ADA) units. ATO and ACO information is normally received electronically through the Army Battle Command System, which receives it from the Theater Battle Management Core System.
- Coordinate airspace control measures to support AMD operations.
- Recommend offensive counter air, defensive counter air, and theater missile defense targets and priorities based on the enemy air and missile capability assessment.
- Coordinate with the S2 to ensure that surveillance and intelligence units locate enemy air support assets.
- Coordinate air defense sensor management.
- Participate in targeting meetings.
- Recommend active and passive air defense measures.
- Determine requirements and recommend assets to support AMD.
- Provide AMD input to the airspace control plan.
- Provide information on the status of AMD systems, air and missile attack early warning radars, and ADA ammunition on hand.

## **CENTER FOR ARMY LESSONS LEARNED**

- Recommend to the S3 the ADA ammunition RSR.
- Provide an estimate of the adequacy of the ADA ammunition CSR.
- Coordinate and synchronize Army forces AMD with joint force AMD.
- Review and recommend joint force counter air ROE and procedures with the SJA.

### Chemical operations:

- Recommend COAs to minimize friendly and civilian vulnerability, and assess the probability and effect of chemical, biological, radiological, nuclear, and high-yield explosives (CBRNE)-related casualties.
- Provide technical advice and recommendations on mission-oriented protective posture (MOPP), troop-safety criteria, operational exposure guidance, CBRNE reconnaissance, smoke operations, biological warfare defense measures, and mitigating techniques.
- Plan and initiate procedures to verify and report enemy first use of CBRNE agents with the surgeon.
- Assess the probability and effect of CBRNE-related casualties.
- Coordinate across the entire staff while assessing the effect of enemy CBRNE-related attacks and hazards on current and future operations.
- Coordinate health support requirements for CBRNE operations with the surgeon.
- Perform CBRNE vulnerability analyses and recommend IRs to the S2 through the S3.
- Plan, supervise, and coordinate CBRNE decontamination operations.
- Supervise the nuclear and chemical accident and incident response assistance program.
- Process and distribute CBRNE attack and contamination data.
- Prepare, manage, and distribute CBRNE messages.
- Prepare CBRNE situation reports.
- Conduct CBRNE reconnaissance operations and coordinate them with the overall ISR plan.
- Assess weather and terrain data to determine if environmental factors favor enemy use of weapons of mass destruction or, at corps level, friendly use of nuclear weapons.

- Predict downwind vapor hazard and fallout patterns and their probable effects on operations.
- Predict fallout from friendly use of nuclear weapons, and disseminate nuclear strike warning messages.
- Plan, coordinate, and manage chemical and radiological survey and monitoring operations.
- Maintain and report radiation exposure and dose status and coordinate with surgeon.
- Participate in targeting meetings.
- Estimate the effect of a unit's radiation exposure state on mission assignments.
- Estimate consumption rates of CBRNE defense equipment and supplies.
- Operate the CBRNE warning and reporting system.
- Oversee construction of CBRNE shelters.
- Plan and recommend integration of smoke and obscurants into tactical operations.
- Develop smoke targets.
- Plan and recommend the use of flame field expedients to supplement unit defense and existing minefields and barriers.
- Advise the commander on using riot control agents.

### Engineer operations:

- Plan and control the engineer battlefield functions, mobility, countermobility, survivability, and general and topographic engineering.
- Plan and coordinate with the S3 and FSCOORD on integrating obstacles and fires.
- Advise the commander on the use of all engineer assets.
- Advise the commander on employing and reducing obstacles.
- Participate in targeting meetings.
- Advise the commander on environmental issues.
- Provide a terrain visualization mission folder to determine the effects of terrain on friendly and enemy operations.
- Manage the digital terrain data storage device.

- Produce maps and terrain products.
- Plan and supervise the construction, maintenance, and repair of camps and facilities for friendly forces, EPWs, and civilian internees.
- Provide information on the status of engineer assets on hand.
- Plan and coordinate environmental protection, critical areas, and protection levels.
- Prepare the engineer battlefield assessment in assisting the S2 with IPB.
- Recommend MSRs and logistic areas based on technical information to the S4.
- Plan the reorganization of engineers to fight as infantry when the commander deems their emergency employment necessary.
- Advise the commander and coordinate with the S3 and S4 for fire protection and prevention issues and planning.

### Provost marshal operations:

- Plan and control maneuver and mobility support operations to include route reconnaissance, surveillance, circulation control, dislocated civilian and straggler control, information dissemination, and tactical and criminal intel collecting and reporting.
- Coordinate components of area security operations including activities associated with force protection; zone and area reconnaissance; CP access control; physical security of critical assets, nodes, and sensitive materials; counter reconnaissance; and security of designated key personnel.
- Coordinate internment and resettlement of EPWs and civilian internees, dislocated civilians, and U.S. military prisoners, including their collection, detention and internment, protection, sustainment, and evacuation.
- Coordinate law and order operations including law enforcement, criminal investigations, counterterrorism, and antiterrorism activities.
- Conduct police intelligence operations including activities related to the collection, assessment, development, and dissemination of police intelligence products.
- Coordinate customs and counterdrug activities.
- Provide physical security guidance for commanders.
- Assist with area damage control and CBRNE detection and reporting.
- Perform liaison with local civilian law enforcement authorities.

- Help the S1 administer discipline, law, and order including AWOL; desertion; court-martial offenses; requests for transfer of internees, detainees, and prisoners; rewards and punishments; and disposition of stragglers.
- Provide AWOL and desertion statistical data to the S1.
- Coordinate for all logistic requirements relative to EPW and civilian internees, U.S. military prisoners, and dislocated civilians.

**"A good battle staff NCO knows the big picture and how his unit fits into it. He also knows what is expected from higher headquarters at least two levels up."**

**–SFC James Hennessey**

### Summary

The duties and functions outlined in this chapter provide battle staff NCOs and principal staff officers specific guidelines associated with WFF-related responsibilities, resulting in better situational awareness of the COP within the TOC/CP.



## **Chapter 3**

### **Battle Staff Rehearsals**

Field Manual (FM) 6.0, *Mission Command: Command and Control of Army Forces*, defines a rehearsal as “a session in which a unit or staff practices expected actions to improve performance during execution.” Rehearsals occur during preparation and are the commander’s tool to ensure staffs and subordinates understand the commander’s intent and concept of operations. Rehearsals also synchronize operations at times and places critical to successful mission accomplishment. The extent of rehearsals depends on available time.

Rehearsals allow participants in an operation to become familiar with the plan. Rehearsals also translate the plan into a visual impression that orients participants to their environment and to other units that will execute the operation. Effective rehearsals imprint a mental picture of the sequence of key actions within the operation and provide a coordination forum for subordinate and supporting leaders and units.

Battle staff rehearsals are critically important to achieve two results:

- Everyone understands each part of the plan.
- Everyone is fully prepared to act when the events do not go exactly as planned.

Soldiers and leaders who understand the plan and then execute it can win the fight. Commanders and staffs have numerous choices when it comes to rehearsing the plan, both in rehearsal types and rehearsal techniques. Familiarity with each will assist the commander in selecting the best way to visualize, clarify, and synchronize the unit’s planned critical actions.

Rehearsing key combat actions allows unit participants to become familiar with the synchronization of the operation. Effective rehearsal planning should determine the following:

- What critical tasks are required?
- What method (how to rehearse) will be used?
- Whom to rehearse.
- When to rehearse.

These commander decisions are based on:

- Time available.
- Unit training status.
- Complexity of the planned operation.
- Unit familiarity with rehearsal types and techniques.

Rehearsal techniques should include commander preferences and guidance regarding each in the unit's tactical standing operating procedures (TACSOP).

### **Rehearsal Techniques**

Generally, battle staffs can choose from six different techniques for executing rehearsals: (Reference: FM 6.0, Appendix F)

- Full dress
- Reduced force
- Terrain model
- Sketch map
- Map
- Network

The resources required for each technique vary from extensive preparation time and resources in the full-dress rehearsal to a map and overlay in the map rehearsal. Each rehearsal technique provides a different degree of understanding to participants. Rehearsal considerations include the following:

- **Time.** Time required to conduct (plan, prepare, execute, and assess) the rehearsal.
- **Echelons involved.** Number of echelons participating in the rehearsal.
- **Operational security (OPSEC).** Ease with which the enemy might gather intelligence from the rehearsal.
- **Terrain.** Factors affecting the space needed to be allocated and secured for the rehearsal.

### **Full-dress rehearsal**

A full-dress rehearsal produces the most detailed understanding of the operation. It involves every participating Soldier and system. If possible, organizations execute full-dress rehearsals under the same conditions—weather, time of day, terrain, and use of live ammunition—that the force expects to encounter during the actual operation. The full-dress rehearsal is the most difficult to accomplish at higher echelons. At those levels, commanders develop a second rehearsal plan that mirrors the actual plan but fits the terrain available for the rehearsal. Rehearsal considerations include the following:

- **Time.** Full-dress rehearsals are the most time consuming of all rehearsal types, and for companies and smaller units, the most effective technique for ensuring all involved in the operation understand their roles. Brigade and task force commanders should consider the time subordinates need to plan and prepare when deciding whether to conduct a full-dress rehearsal.

- **Echelons involved.** A subordinate unit can perform a full-dress rehearsal as part of a larger organization's reduced-force rehearsal.
- **OPSEC.** Moving a large part of the force may attract enemy attention. Commanders must develop plans to protect the rehearsal from enemy surveillance and reconnaissance. One method is to develop a plan including graphics and radio frequencies that rehearses selected actions but does not compromise the actual operations order (OPORD). When using this technique, commanders should take care not to confuse subordinates.
- **Terrain.** Terrain management for a full-dress rehearsal can be difficult if it is not considered during the initial array of forces. The rehearsal area must be identified, secured, cleared, and maintained throughout the rehearsal.

### Reduced-force rehearsal

A reduced-force rehearsal involves only key leaders of the organization and its subordinate units. It normally takes fewer resources than a full-dress rehearsal. The commander first decides the level of leader involvement. The selected leaders then rehearse the plan while traversing the actual or similar terrain. Commanders often use this technique to rehearse fire control measures for an engagement area during defensive operations. A reduced-force rehearsal may be used to prepare key leaders for a full-dress rehearsal. Rehearsal considerations include the following:

- **Time.** A reduced-force rehearsal normally requires less time than a full-dress rehearsal. Commanders should consider the time their subordinates need to plan and prepare when deciding whether to conduct a reduced-force rehearsal.
- **Echelons involved.** A small unit can perform a reduced-dress rehearsal as part of a larger organization's full-dress rehearsal.
- **OPSEC.** A reduced-force rehearsal is less likely to present OPSEC vulnerability than a full-dress rehearsal because the number of participants is smaller. However, the number of radio transmissions required is the same as for a full-dress rehearsal and remains a consideration.
- **Terrain.** Terrain management for the reduced-force rehearsal can be just as difficult as for the full-dress rehearsal. The rehearsal area must be identified, secured, cleared, and maintained throughout the rehearsal.

### Terrain-model rehearsal

A terrain-model rehearsal takes fewer resources than a full-dress or reduced-force rehearsal and is the most popular rehearsal technique. (A terrain-model rehearsal takes a proficient brigade from one to two hours to execute to standard.) An accurately constructed terrain model helps subordinate leaders visualize the commander's intent and concept of operations. When possible, commanders place the terrain model where it overlooks the actual terrain of the area of operations (AO). However, if the situation requires more security, they place the terrain model

on a reverse slope within walking distance of a point overlooking the AO. The model's orientation coincides with that of the terrain. The size of the terrain model can vary from small (using markers to represent units) to large (which allows participants to walk the terrain). A large model helps reinforce the participants' perception of unit positions on the terrain. Rehearsal considerations include the following:

- **Time.** Often the most time-consuming part of this technique is constructing the terrain model. To ensure the model is accurate, large, and detailed enough to rehearse the operation, units need clear standing operating procedures (SOPs) for building the terrain model. A good SOP also states who will build the terrain model and when.
- **Echelons involved.** Because a terrain model is geared to the echelon conducting the rehearsal, using this technique for multi-echelon rehearsals is difficult.
- **OPSEC.** This rehearsal can present OPSEC vulnerability if the area around the rehearsal site is not secured. The collection of commanders and their vehicles can draw enemy attention. Units must sanitize the terrain model after completing the rehearsal.
- **Terrain.** Terrain management is less difficult than with the previous techniques. A good site is easy for participants to find, yet concealed from the enemy. An optimal location overlooks the terrain where the unit will execute the operation.

### Sketch-map rehearsal

Commanders and staffs can use a sketch-map rehearsal almost anywhere, day or night. The procedures are the same as for a terrain-model rehearsal, except the commander uses a sketch map in place of a terrain model. Effective sketches are large enough for all participants to see as each participant walks through the execution of the operation. Participants move markers on the sketch to represent unit locations and maneuvers. Rehearsal considerations include the following:

- **Time.** Sketch-map rehearsals take less time than terrain-model rehearsals and more time than map rehearsals.
- **Echelons involved.** Because a sketch map is geared to the echelon conducting the rehearsal, using this technique for multi-echelon rehearsals is difficult.
- **OPSEC.** This rehearsal can present OPSEC vulnerability if the area around the rehearsal site is not secured. The collection of commanders and their vehicles can draw enemy attention.
- **Terrain.** This technique requires less space than a terrain-model rehearsal. A good site is easy for participants to find, yet concealed from the enemy. An optimal location overlooks the terrain where the unit will execute the operation.

## **Map rehearsal**

Map rehearsal techniques are similar to sketch-map rehearsal techniques, except the commander uses a map and operation overlay of the same scale used to plan the operation. Rehearsal considerations include the following:

- **Time.** The most time-consuming part is the rehearsal itself. A map rehearsal is normally the easiest technique to set up, since it requires only maps and current operational graphics.
- **Echelons involved.** Because a sketch map is geared to the echelon conducting the rehearsal, using this technique for multi-echelon rehearsals is difficult.
- **OPSEC.** This rehearsal can present OPSEC vulnerability if the area around the rehearsal site is not secured. The collection of commanders and their vehicles can draw enemy attention.
- **Terrain.** This technique requires the least space of any rehearsal. A good site is easy to find for participants, yet concealed from the enemy. An optimal location overlooks the terrain where the unit will execute the operation.

## **Network rehearsals**

Units can execute network rehearsals over wide area networks or local area networks. Commanders and staffs execute network rehearsals by talking through critical portions of the operation over communications networks in a sequence the commander establishes. The organization rehearses only the critical parts of the operation. These rehearsals require all information systems (INFOSYS) needed to execute that portion of the operation. All participants require working INFOSYS and a copy of the OPOD and overlays. Command posts can rehearse battle tracking during network rehearsals. Rehearsal considerations include the following:

- **Time.** If the organization does not have a clear SOP and if all units do not have working communications or are not up on the net, this technique can be very time consuming.
- **Echelons involved.** This technique lends itself to multi-echelon rehearsals. Participation is limited only by the commander's desires and the capabilities of the command's INFOSYS.
- **OPSEC.** If a network rehearsal is executed from current unit locations, the volume of the communications transmissions and potential compromise of information through enemy monitoring can present OPSEC vulnerability. The organization should use different frequencies from those planned for the operation. Using wire systems is an option but does not exercise the network systems, which is the strong point of this technique.
- **Terrain.** If a network rehearsal is executed from unit locations, terrain considerations are minimal. If a separate rehearsal area is required, considerations are similar to those of a reduced-force rehearsal.

Figure 3-1, extracted from FM 6.0, Appendix F, visually depicts the relationship between the different rehearsal techniques. It shows the amount of preparation, resources required, time used, OPSEC risk, leadership participation, and the amount of detailed understanding that rehearsal participants may likely gain.

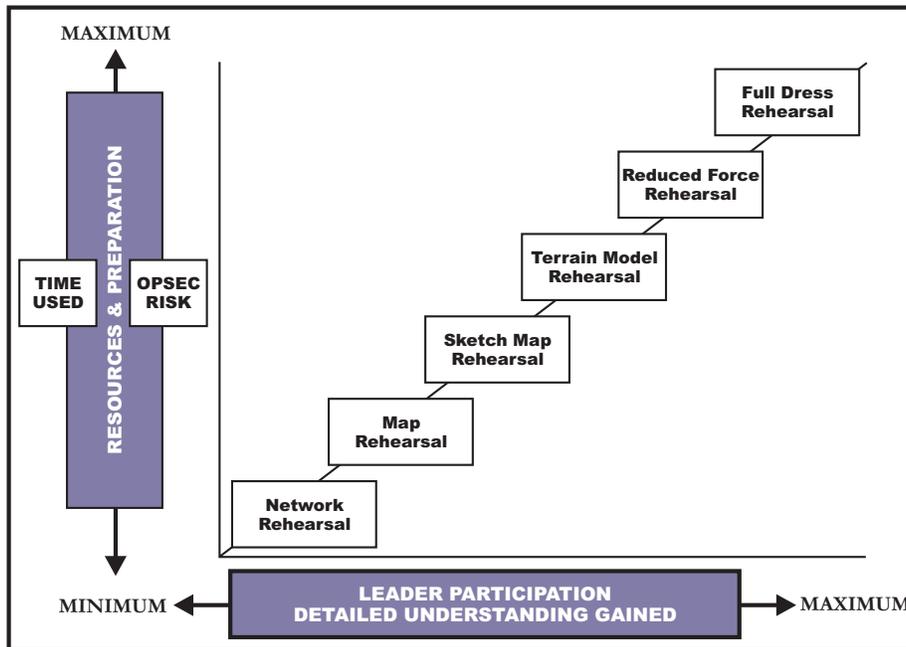


Figure 3-1

## Unit Rehearsals

### Directing the unit rehearsal

One of the most critical aspects of conducting a rehearsal is how the unit controls its execution. The executive officer (XO) directs the rehearsal. Before a rehearsal unfolds, participants review their roles and responsibilities and, if necessary, conduct an individual or team rehearsal of their parts. Before the rehearsal begins, the rehearsal director (normally the XO) begins by calling the roll. He briefs participants on the information needed to execute the rehearsal and leads discussion on the rehearsal script and ground rules.

### Rehearsal focus

Unit battle staffs should, at a minimum, study paragraph 3 (Execution) of the unit OPORD to identify the planned critical events that should be rehearsed. Focusing a rehearsal is directly linked to the OPORD, the decision support template (DST), the execution matrix, and the synchronization matrix, which have been developed during the military decision-making process. These products guide the execution of the rehearsal with focus on key events and the synchronization necessary to achieve the commander's desired effects. Based on the staff's recommendation, the commander selects one course of action (COA). This COA is the one that will be rehearsed.

## **Rehearsal responsibilities**

Planning for, setting up, and controlling a rehearsal involves the entire staff, principally the commander, XO, S3, and S2. A successful rehearsal involves knowing what actions are required and the separate and shared responsibilities of each staff member.

FM 6-0, Appendix F, provides doctrinal guidance regarding commander and staff rehearsal responsibilities, but each unit commander may designate additional roles and responsibilities. Awareness of responsibility is important. Units should add a “rehearsal responsibility” section to their TACSOPs to ensure understanding and compliance. Listed below are command and staff responsibility tasks (“A Way”) during planning, preparation, and execution. Units should consider adding these tasks to their TACSOPs or updating their TACSOPs as necessary. The unit commander may choose to include other key personnel and additional or different responsibilities. The responsibilities are not intended to be all-inclusive.

- Planning. Commanders, XOs, and S3s plan rehearsals.
  - Commander:
    - \* Designates the type of rehearsal
    - \* Defines rehearsal technique
    - \* Determines location
    - \* Determines number of attendees
    - \* Covers enemy COAs
  - XO:
    - \* Publishes rehearsal time
    - \* Publishes rehearsal location
    - \* Completes rehearsals with staff
    - \* Determines rehearsal products
    - \* Designates personnel to prepare site
    - \* Coordinates liaison officer (LNO) attendance from adjacent units
  - S3: Plans and prepares the rehearsal script in collaboration with the XO.
- Preparation: Everyone involved in executing or supporting the rehearsal has responsibilities.

- Commander:
  - \* Identifies and prioritizes key events
  - \* Allocates time for events
  - \* Conducts personal preparation
  - \* Checks completeness of task organization
  - \* Checks readiness of personnel and material
  - \* Determines unit level of preparation
  - \* Ensures nesting of subordinate plans, task, and purpose
- XO:
  - \* Coordinates and allocates time for key events; ensures logical flow
  - \* Establishes rehearsal time limits
  - \* Verifies rehearsal site preparation
  - \* Verifies site as accurate and complete
  - \* Verifies local security
  - \* Determines method for controlling
- Subordinate leaders:
  - \* Complete unit orders and plans and identify by task and purpose
  - \* Identify issues from parent unit order
- Battle Staff: Publishes composite overlays and de-conflict graphics
- Execution: The following paragraphs list the participants' responsibilities during the execution phase of rehearsals.
  - Commander:
    - \* Commands the rehearsal
    - \* Maintains focus and intensity
    - \* States key decision for each fight

- XO:
  - \* Highlights commander's decision points
  - \* Directs the rehearsal
  - \* Uses OPORD, DST, and synchronization matrix to control the rehearsal
  - \* Conducts roll call
  - \* Ensures necessary equipment is present
  - \* Ensures necessary personnel are present
  - \* Validates task organization
  - \* Ensures linkups are scheduled/complete
  - \* Rehearses synchronization of combat power
  - \* Disciplines leader activities
  - \* Enforces brevity
  - \* Ensures completeness
  - \* Manages time within constraints
  - \* Ensures attention to key events
  - \* Ensures absentees receive changes
- S2:
  - \* Portrays best assessment of enemy COAs
  - \* Communicates enemy commander's operations concept
  - \* Communicates enemy desired end state
  - \* Communicates enemy desired effects
  - \* Coordinates with the sergeant major (SGM) for security
- S3:
  - \* Rehearses fight forward with the commander
  - \* Portrays key S3 actions during the fight

- \* Ensures subordinate compliance with plan
- Subordinate leaders:
  - \* Articulate unit actions and responsibilities
  - \* Record changes by task and purpose
- Recorder:
  - \* Restates changes directed by the commander
  - \* Provides time for fragmentary order (FRAGO) with changes
- Battle staff:
  - \* Updates OPORD
  - \* Updates DST/decision support matrix
  - \* Updates synchronization matrix
  - \* Validates roles
- Operations SGM:
  - \* Selects a location for the rehearsal
  - \* Heightens security measures in and around the designated location
  - \* Establishes an entry control point
  - \* Collaborates and requests additional setup help from each staff section
  - \* Manages/posts a setup time schedule
  - \* Ensures terrain board tool kit is on hand
  - \* Ensures a copy of the headquarters' TACSOP is on hand
  - \* Depicts key boundaries, graphic control measures, and higher and lower headquarters' locations
  - \* Brings additional supplies
  - \* Coordinates audiovisual team

- \* Coordinates S6/G6 support
- \* Ensures security is emplaced

**Conducting the Rehearsal – “A Way”**

Use the following information to begin the rehearsal:

- Five-paragraph OPORD
- Overlays
- Tools from COA analysis (execution matrix, synchronization matrix, and DST)
- A rehearsal script (written by the S3 in collaboration with the XO) that includes an agenda and response sequence to control the rehearsal
- Whatever physical construct (e.g., terrain model) is required and designated participants present

The table below provides a generic sequence of events for a rehearsal. It represents “A Way” to conduct rehearsals; the list is not all-inclusive.

<b>Rehearsal Sequence of Events</b>	
<b>Step</b>	<b>Actions Taken</b>
<b>1. Provide the ground rules</b>	<ul style="list-style-type: none"> <li>• <b>Conduct roll call.</b></li> <li>• <b>Start on time.</b></li> <li>• <b>Review key points of SOP to ensure understanding.</b></li> <li>• <b>Designate a recorder.</b></li> <li>• <b>State agenda to be used (OPORD, synchronization matrix, DST) and rehearsal type.</b></li> <li>• <b>Orient participants to rehearsal tools and key graphic control measures.</b></li> <li>• <b>Designate start time in relation to planned operation.</b></li> <li>• <b>Ensure participants understand the plan.</b></li> <li>• <b>Update friendly activities (i.e., intelligence, surveillance, and reconnaissance [ISR] plan)</b></li> <li>• <b>Update enemy activities.</b></li> <li>• <b>Establish strict finish time.</b></li> </ul>

<p><b>2. Enemy deployment</b></p>	<ul style="list-style-type: none"> <li>• <b>Deploy the enemy as they would look at the rehearsal starting point.</b></li> <li>• <b>Restarting enemy equipment is not necessary (although it may be required at critical points).</b></li> </ul>
<p><b>3. Friendly deployment</b></p>	<ul style="list-style-type: none"> <li>• <b>Deploy friendly and adjacent units as they would look at the rehearsal starting point.</b></li> <li>• <b>State task, purpose, organization, and strength of friendly units.</b></li> </ul>
<p><b>4. Advancement of the attacking force</b></p>	<ul style="list-style-type: none"> <li>• <b>Advance and continue in accordance with war-gaming sequence.</b></li> <li>• <b>Tie enemy actions to specific terrain or friendly unit actions.</b></li> <li>• <b>Accurately portray and communicate situation template.</b></li> <li>• <b>Portray the enemy as uncooperative but not invincible.</b></li> </ul>
<p><b>5. Decision point (DP)</b></p>	<ul style="list-style-type: none"> <li>• <b>Upon completion of the enemy action, assess conditions to determine if a DP has been reached.</b></li> <li>• <b>At DP, the S3/XO state DP conditions and actions.</b></li> <li>• <b>At DP, the commander decides on current course or a branch.</b></li> <li>• <b>If staying current course, pursue next event on your synchronization matrix.</b></li> <li>• <b>Advance friendly units.</b></li> <li>• <b>If commander selects a branch, he states why.</b></li> <li>• <b>First event of branch is stated.</b></li> <li>• <b>Rehearsal continues until branch events are complete.</b></li> <li>• <b>If not at a DP or desired end state, continue with your synchronization matrix events.</b></li> <li>• <b>Continue sequence and act out/ verbalize unit actions.</b></li> </ul>

<p><b>6. End state reached</b></p>	<ul style="list-style-type: none"> <li>• <b>End initial phase of rehearsal when desired end state is reached.</b></li> <li>• <b>If offensive operation, end after consolidation and casualty evacuation.</b></li> <li>• <b>If defensive operation, end after decisive action and casualty evacuation.</b></li> </ul>
<p><b>7. Re-cock</b></p>	<ul style="list-style-type: none"> <li>• <b>After initial phase, re-cock to situation at first DP.</b></li> <li>• <b>Rehearse any changes to the plan.</b></li> <li>• <b>XO states criteria for decision to change the plan.</b></li> <li>• <b>If criteria are met, re-fight the battle from that point forward.</b></li> <li>• <b>Complete coordination to ensure understanding and requirements met.</b></li> <li>• <b>Record any changes to the plan.</b></li> <li>• <b>Repeat actions until all DPs and branches are rehearsed.</b></li> </ul>
<p><b>8. Follow-up and coordination</b></p>	<ul style="list-style-type: none"> <li>• <b>As issues arise, record immediately.</b></li> <li>• <b>Review issues at end of rehearsal and make decisions as appropriate.</b></li> <li>• <b>If “war stopper” issue is identified, stop and take action immediately.</b></li> <li>• <b>Address key combat service and combat service support items/events; take appropriate action.</b></li> <li>• <b>Update DST; provide to each leader before his departure.</b></li> </ul>

**Table 3-1: Rehearsal Sequence of Events**

**After-Action Review (AAR)**

After the rehearsal, time permitting, the commander leads an AAR. At a minimum, the AAR should cover lessons learned; appropriate plan modifications via a FRAGO; last-minute commander’s guidance; plan adjustments by subordinate commanders; and dissemination of plan changes to higher, lower, and adjacent units/elements. See Chapter 5, After-Action Review, for a more detailed discussion of this process.

### **Conclusion**

Each unit will have its own variation of battle staff rehearsal techniques, terrain modeling, and wargaming. However, there should always be time for a quick rehearsal (often referred to as a “rock drill”) where leaders walk through the battle plan to obtain a common picture of the overall mission. As a miniature battlefield, the terrain model is a useful platform to visualize, evaluate, and rehearse the battle plan. Everyone on the team should have the opportunity to visualize the operation prior to execution.

Battle staffs that rehearse the plan prior to execution during actual combat operations or other types of military operations will have a better situational understanding of how to integrate and synchronize the plan. Battle staff NCOs are an integral part of this process. Successfully rehearsing the game plan in a training setting ultimately translates to enhanced mission accomplishment in the operational environment.

## Chapter 4

### Troop-Leading Procedures for Battle Staff NCOs

A tactical operations center (TOC)/command post (CP) that has a well-established system of checks and inspections will consistently perform to standard. Battle staff noncommissioned officers (NCOs) establish checks and inspections that support the unit’s mission-essential task list (METL). Once established, they ensure the checks and inspections are performed before and after any kind of operation. Checks and inspections fall into the following categories:

- Precombat checks (PCC)
- Precombat inspections (PCI)
- Post-combat checks
- Post-combat inspections

PCC help prepare the TOC/CP for combat or other types of military operations. These include checks for individuals, vehicles, weapons, and equipment. While these checklists are generic, they can be easily tailored to fit a unit’s specific needs. NCOs at all levels use these checklists in planning and preparing instructions to their subordinate leaders.

An example of a PCC checklist (“A Way”) is shown below; it is not all-inclusive.

<b>Vehicle preparations</b>	<ul style="list-style-type: none"> <li>• <b>Load vehicles according to the load plan.</b></li> <li>• <b>Refuel vehicles/generators.</b></li> <li>• <b>Fill water cans full; stow Class I (rations).</b></li> <li>• <b>Clean and stow equipment.</b></li> <li>• <b>Complete and stow first-aid kit/combat-lifesaver (CLS) bag.</b></li> <li>• <b>Dispatch vehicle with technical manual (TM) and tool kit.</b></li> <li>• <b>Stow basic load of ammunition.</b></li> <li>• <b>Ensure trailers are properly hooked up.</b></li> </ul>
<b>Communications equipment</b>	<ul style="list-style-type: none"> <li>• <b>Ensure radios are operational, mounted, and secured; connections and receptacles cleaned; and frequencies set</b></li> <li>• <b>Ensure medical evacuation (MEDEVAC) frequency is posted.</b></li> <li>• <b>Ensure antenna matching unit(s) are operational.</b></li> <li>• <b>Test communication security (COMSEC) equipment.</b></li> <li>• <b>Stow operational telephones.</b></li> <li>• <b>Ensure Global Positioning System (GPS), OE-254 antenna, satellite communications are complete, operational, and stowed.</b></li> <li>• <b>Enter and monitor all required nets.</b></li> </ul>

**CENTER FOR ARMY LESSONS LEARNED**

<b>Chemical, biological, radiological, and nuclear (CBRN)</b>	<ul style="list-style-type: none"> <li>• <b>Mount operational M11 decontamination (decon) apparatus.</b></li> <li>• <b>Stow hasty decon kit (with DS-2) and nitrogen bottles.</b></li> <li>• <b>Mount automatic chemical alarm.</b></li> <li>• <b>Stow M256 kits.</b></li> </ul>
<b>Optics</b>	<ul style="list-style-type: none"> <li>• <b>Ensure night-vision devices and binoculars are cleaned, operational, and stowed.</b></li> </ul>
<b>Maintenance</b>	<ul style="list-style-type: none"> <li>• <b>Conduct preventive maintenance checks and services on all equipment.</b></li> <li>• <b>Complete DA Form 2404(s) (Equipment Inspection and Maintenance Worksheet) on all equipment.</b></li> <li>• <b>Ensure all basic issue items and -10 technical manuals are on hand.</b></li> </ul>
<b>Personnel</b>	<ul style="list-style-type: none"> <li>• <b>Ensure Soldiers have all required personal equipment such as Kevlar helmet, load bearing equipment, body armor, protective mask, and two sets of identification tags.</b></li> <li>• <b>Establish feed and sleep plan.</b></li> </ul>
<b>Armaments</b>	<ul style="list-style-type: none"> <li>• <b>Ensure Soldiers are familiar with and have zeroed assigned weapons.</b></li> <li>• <b>Clean and test-fire all weapons.</b></li> </ul>

PCI validate that Soldiers have performed PCC. NCOs ensure that inspections are performed. NCOs should not delegate this responsibility; the NCO must be the inspector. This responsibility demands that he be competent in the maintenance and care of all of his unit’s equipment. The standards he sets will determine the unit’s ability to perform in combat. NCOs must also allocate time for corrective actions should an individual or item fail the inspection.

Post-combat checks are identical in form to PCC but differ in substance. The battle staff NCO performs checks on individuals, vehicles, weapons, and equipment. However, during post-combat checks the focus changes to repairing and refitting items to a reusable condition. Units must replenish and/or replace expendable and lost items. Units replace their basic-load items and ensure that equipment has its full complement of petroleum, oil, and lubricants. Units also evacuate damaged and non-operational equipment for repair.

TOC/CP NCOs plan and conduct post-combat inspections. Inspections must focus on serviceability. Vehicles and equipment must be operated to standard. A check of all radios requires that a net station be positioned at a distance consistent with combat conditions. It does a unit no good to be able to talk only in an assembly area. Allocate sufficient time to perform these inspections. An inspection that checks only one of every three weapons ensures that the unit is only one-third operable. A 100-percent inspection must be made of everything.

The table below provides an example of “A Way” to conduct a post-combat inspection.

<b>Vehicle preparations</b>	<ul style="list-style-type: none"> <li>• <b>Load vehicles according to the load plan.</b></li> <li>• <b>Refuel vehicle.</b></li> <li>• <b>Fill water cans full; stow Class I (rations).</b></li> <li>• <b>Clean and stow equipment.</b></li> <li>• <b>Complete and stow first-aid kit/CLS bag.</b></li> <li>• <b>Dispatch vehicle with TM and tool kit.</b></li> <li>• <b>Stow basic load of ammunition.</b></li> </ul>
<b>Communications equipment</b>	<ul style="list-style-type: none"> <li>• <b>Ensure radios are operational, mounted, and secured; connections and receptacles cleaned; and frequencies set.</b></li> <li>• <b>Ensure MEDEVAC frequency is posted.</b></li> <li>• <b>Ensure antenna matching unit(s) are operational.</b></li> <li>• <b>Test COMSEC equipment.</b></li> <li>• <b>Stow operational telephones.</b></li> <li>• <b>Ensure GPS, OE-254 antenna, satellite communications are complete, operational, and stowed.</b></li> <li>• <b>Enter and monitor all required nets.</b></li> </ul>
<b>Chemical, biological, radiological, and nuclear (CBRN)</b>	<ul style="list-style-type: none"> <li>• <b>Mount operational M11 decon apparatus.</b></li> <li>• <b>Stow hasty decon kit (with DS-2) and nitrogen bottles.</b></li> <li>• <b>Mount automatic chemical alarm.</b></li> <li>• <b>Stow M256 kits.</b></li> </ul>
<b>Optics</b>	<ul style="list-style-type: none"> <li>• <b>Ensure night-vision devices and binoculars are cleaned, operational, and stowed.</b></li> </ul>
<b>Maintenance</b>	<ul style="list-style-type: none"> <li>• <b>Conduct preventive maintenance checks and services on all equipment.</b></li> <li>• <b>Complete DA Form 2404(s) (Equipment Inspection and Maintenance Worksheet) on all equipment.</b></li> </ul>
<b>Armaments</b>	<ul style="list-style-type: none"> <li>• <b>Clean and test-fire all weapons.</b></li> </ul>



## **Chapter 5**

### **After-Action Review**

Note: The following chapter is an abridged version of an original article that appeared in Center for Army Lessons Learned publication *News from the Front*, May-June 2006, titled “The Art of the After Action Review,” by CSM (USA, Ret) Jack Hardwick, CSM Mentor, Joint Readiness Training Center Operations Group. This chapter demonstrates how to administer an effective AAR from company up to brigade level. Battle staff noncommissioned officers (NCOs) are an integral part of this important process at the battalion and brigade levels.

---

#### **Ingredients of a Successful After-Action Review (AAR)**

Unit collective learning occurs through the AAR process. Leaders do not give AARs, although that language is often used. An AAR is not a one-sided presentation. An AAR is a professional discussion of an event and focused on performance standards that enable Soldiers to discover for themselves what happened, why it happened, and how to sustain strengths and improve weaknesses uncovered during the event under review. In other words, the unit examines the past event to see how it could do things better the next time. It is not a purely negative process; pointing out a strength is often more important to future success than focusing entirely on weaknesses.

The challenge for the facilitator of an AAR is to foster a spirit of self-analysis in both Soldier and leader. An AAR is critical to the entire training unit. The leaders must be willing to learn from the Soldiers who took part in the event. The Soldiers must open their ears and their minds in the same way. A platoon sergeant or lieutenant who listens to his Soldiers discussing the mistakes they made in a room-clearing action may be able to limit such mistakes in the future. Soldiers who hear their officers and NCOs discussing the effectiveness of a support-by-fire position stand to learn much more than just their own roles. An AAR must be a candid discussion by all on what they saw, did, or were told to do.

It is up to the person in charge of the AAR to facilitate discussion. The AAR process actually begins well before the exercise or the conduct of an actual combat operation. For instance, for a training event, the AAR facilitator must know the training objectives and standards before the first Soldier begins training. In fact, the AAR facilitator initiates preparation for his AAR before training actually takes place. He first looks at the mission essential task list the unit wishes to accomplish and identifies the collective and individual tasks that contribute to the accomplishment of the mission. Then the AAR facilitator identifies the tactics, techniques, and procedures and doctrine that apply to those tasks. He also reviews the unit’s standing operating procedures. Thorough preparation helps define the standards for the unit. The AAR facilitator must ensure his team is equally well prepared. He must have specific tasks to observe, be in a position to observe those tasks, and be able to provide professional feedback to the unit.

### **Types of AARs**

There are two types of AARs — informal and formal.

The informal AAR is usually for Soldiers, crews, squads, and platoons. Informal does not mean less important. An informal AAR requires fewer training aids or facilities. Observations can be noted informally in items such as the “green book.” In a “green book” AAR, the facilitator provides information directly to the person he observes. This informal AAR is a professional discussion and not a critique. It must achieve the same level of self-awareness and discussion as would a formal AAR with a group of Soldiers.

The formal AAR requires more resources and involves the planning, coordination, and preparation of supporting training aids, the AAR site, and support personnel.

### **AAR Rehearsal**

Presenting a professional, effective AAR means rehearsing. Unlike a critique where time is controlled by the material presented, the AAR is controlled more by the intercommunication of those involved in the exercise, which can be a problem if the unit does not want to discuss the issues presented. The AAR facilitator must be able to ask leading open-ended questions to obtain explanations and not settle for a yes or no answer. Rehearsing the questions and having the facts of what happened will greatly enhance the quality of the AAR. The AAR should be able to answer the following questions:

- What was planned?
- What were the goals/objectives? (Ask the unit sub-leaders to identify their missions and objectives before they ask the leaders.)
- What were the expected barriers? (Ask the unit what problems it thought it would face or what assumptions, if any, were used in formulating the plan.)
- Did the unit conduct risk assessment before the mission? (This third step is critical because it ties the answers about objectives to the possible roadblocks to those objectives.)
- What really happened? (Ask leading questions to elicit a discussion of what happened. Be equally adept at listening in order to turn negative results into positive lessons learned.)
- Why did it happen? (Discuss both success and failure. To sustain success, the unit needs to know what it is doing well. Concentrate on identifying what was wrong versus who was wrong.)
- What can we do to fix it? (Identify problems and provide fixes as well as identify who will make those fixes.)

## **Summary**

A good AAR process takes time, teamwork, and rehearsals. The AAR facilitator and team must establish and build trust with the unit. Trust is developed by working together during training rotations at home station, at a combat training center, or power projection platform, and, ultimately, during combat operations. The AAR has been around for a long time. Those that understand it know it will help the unit to improve. The AAR process (formal or informal) is the best means to see ourselves and make corrections where they are needed. Never be comfortable where you are. Continue to look at how you do business, and make improvements even to those things you do well. Strive to learn every day. When you stop learning, you are dead. The AAR is a means to make a great organization better and to save lives.



## **Appendix A**

### **Battle Tracking Enablers**

This appendix provides the commander and his staff with a quick breakdown of the elements in the Command Post of the Future (CPOF) and the Army Battle Command System (ABCS) that enable units to track elements and share information with higher, lower, and adjacent units.

#### **Common Operational Picture**

With the digitization of the command post, the most efficient method of battle tracking at the brigade combat team (BCT)-level is with a common operational picture (COP). The COP provides the commander with a uniform picture of the entire battlefield.

With the introduction of the ABCS 6.4 System of Systems (SoS), the Army links 11 systems so commanders can have access to the information they need in the form of a COP. At the BCT echelon, the COP comprises the following:

- AFATDS: Advanced Field Artillery Tactical Data System (fires and effects coordination cell [FECC])
- AMDPCS: Air and Missile Defense Planning and Control System (air defense and airspace management)
- ASAS: All-Source Analysis System–Light (intelligence, surveillance, and reconnaissance [ISR] cell/S2X team)
- BCS3: Battle Command Sustainment and Support System (sustainment section)
- DTSS: Digital Topographic Support System (engineer cell)
- FBCB2: Force XXI Battle Command Brigade and Below (maneuver and support section)
- IMETS: Integrated Meteorological System (ISR cell/FECC)
- ISYSCON: Integrated System Control (S6/G6 section)
- GCCS-A: Global Command and Control System–Army (maneuver and support section)
- MCS: Maneuver Control System (maneuver and support section)
- TAIS: Tactical Airspace Integration System (maneuver and support section/tactical air control party)

Each system adds to the COP.

AFATDS provides the fire support view to the COP by depicting fire support coordination measures and target data, which includes weapon/radar range fans,

preplanned fires, final protective fires, and active missions. The target data includes active, inactive, planned, and on-call targets. The Effects Management Tool displays the firing vectors for active missions processed by AFATDS.

AMDPCS displays the air picture (rotary-wing, fixed-wing, unmanned aerial system, sensor/shooter locations [the “umbrella”], and tactical ballistic missile/antiballistic missile alerts) on the COP. It enhances collaborative planning with threat corridor displays, playback capability, and the air defense plan and estimate.

ASAS is the system responsible for managing the threat picture and intelligence operations found in the S2/G2 section. ASAS is an intelligence fusion system that provides a timely, accurate, and relevant picture of the enemy situation to the commander. It accomplishes this by receiving uncorrelated enemy spot reports from FBCB2 and external database coordination messages, giving the analyst the ability to fuse incoming data into an accurate “red picture” of correlated units, known as the situation template (SITEMP) overlay.

The SITEMP overlay is the main contribution of the ASAS to the COP, and it is displayed through the MCS via publish and subscribe services (PASS). PASS is accomplished when the ASAS publishes the SITEMP overlay to the Advanced Information System (AIS); then the MCS subscribes to the SITEMP overlay and pulls that information from the Battle Control System to a mission (map) displaying the COP. The actual live feed of uncorrelated red units can be distributed to the MCS through “Red Live Feed” settings in the “Maps and Overlays” application in MCS. This method presents a busy picture of enemy activity. The intelligence staff has not evaluated all of this enemy activity. Therefore, the enemy situation posted to the COP usually involves the correlated enemy activity found in the SITEMP.

BCS3 facilitates the transmission of logistical information to the COP via logistic overlays, which includes all friendly and enemy locations, main supply routes, and unit status. BCS3 provides the maneuver commander from theater to brigade level the capability to access his current combat power displayed on a personal computer with a Web browser using current operational information. This information comes from FBCB2/Blue Force Tracker exchange of data via Excel-like spreadsheets or manual input and provides the running estimate of the status of fuel, ammunition, weapons platforms/equipment, and personnel.

DTSS terrain analysis products that contribute to the COP include on- and off-road mobility maps, line of sight intervisibility plots, concealment maps, on-road choke point maps, and tactical fording/bridging maps. The DTSS must subscribe to the AIS to obtain graphics from MCS, weather from IMETS, and the enemy situation from ASAS. DTSS does not publish its products to the AIS. The overlays from the DTSS can be messaged (K05.17) or data transferred to MCS for incorporation to the COP.

FBCB2 uses blue icons to show the location of individual friendly vehicles on the COP. It provides situational awareness (SA) by telling the user his location as well as the location of other friendly forces, observed enemy forces, and reported battlefield obstacles. This SA is best seen at the battalion level. FBCB2 geo-referenced reports, such as the obstacle report; bridge report; threat warnings; nuclear, biological, and chemical reports; and spot reports, are sent as digital messages. Sending the report can result in red icons populating all users’ screens.

The message is also sent to the ASAS system supporting the observer (usually the battalion or brigade S2). Integration with the Global Positioning System and laser range finders improves the accuracy of these reports.

In addition to supporting weather briefings, IMETS is also able to analyze and graphically display the impact of current, projected, or even hypothesized weather conditions on friendly and enemy capabilities. Instead of reacting to the weather, IMETS enables the warfighter to leverage weather conditions. IMETS provides the weather view for the COP by publishing the IMETS weather products to the AIS. Subsequently, the IMETS weather products are usually displayed through the MCS. MCS obtains the IMETS products, namely the weather impact overlays, low-level winds display, and the Integrated Weather Effects Decision Aid (IWEDA), by subscribing to the "Weather: IMETS" topic in the BCS. The weather view includes weather impact overlays, decision aids, weather contours, and symbols. The low-level winds display shows the results of wind-activity analysis over an area of operations. The IWEDA displays weather effects on weapon systems or missions in 24-hour periods, whether it is favorable, marginal, or unfavorable.

The ISYSCON is found in the S6/G6 section. It provides an automated, theater-wide system that signal units use to manage multiple tactical communications systems in support of battlefield operations. The ISYSCON facility provides an automated, integrated method for managing the tactical communications networks and interfaces with each warfighting functional area in the architecture. A change to the requirements document has added planning and management of military satellite communications resources.

The mission of GCCS-A is to support monitoring, planning, and executing joint, combined, and Army conventional military operations. As such, GCCS-A supports information exchanges with numerous joint systems, ABCS subsystems, and coalition forces. It is the digital command and control link between joint task force and strategic commanders to Army operational and tactical commanders by way of the Joint Global Command and Control System. GCCS-A provides the joint view for the COP. It gives the locations of Army forces at echelons above corps, as well as joint and coalition units, aircraft, vessels, and facilities. The GCCS-A publishes to the BCS the joint-level graphics overlay that displays ground units, naval vessels, aircraft, obstacles, and military installations. The GCCS-A products are displayed on the COP, usually through the MCS. The MCS subscribes to the "Graphics: GCCS-A" topic in the BCS to obtain the GCCS-A products for the COP.

Presently, MCS consists of MCS workstations that run on a notebook computer using the Microsoft Windows XP operating system and an MCS server, which is a more powerful computer running Microsoft Windows Server 2003 OS. In some command posts (CPs) where there are not enough resources to host an MCS server, there will be an MCS Gateway. An MCS Gateway is a notebook computer running Windows XP, which also provides some of the services found on an MCS server. Together, the MCS server and the MCS workstation serve the maneuver battlefield functional area and provide the COP for the rest of the CP.

TAIS contributes to the COP by providing the airspace view through a two- and three- dimensional (3-D) airspace view, displaying airspace control orders (ACOs) and airspace control measures (ACMs) through MCS. TAIS can deconflict ACOs and ACMs. By rotating the 3-D representation of the airspace, the operator can see

these orders and measures from different angles. TAIS will highlight conflicts in intended airspace usage during Army airspace command and control (A2C2) planning and execution. The Air Traffic System display includes information from the ACO and ATO. TAIS operators can use this display to track the flight of aircraft. TAIS will alert the operator if an aircraft leaves the safe transition corridor. The TAIS products, such as the ACO and A2C2 overlays, are published to the AIS, and it subscribes products from other systems in ABCS. MCS usually subscribes to the AIS to obtain the A2C2 overlays for posting to the COP.

### **Command Post of the Future**

CPOF is an executive-level decision support system that provides SA and collaborative tools to support commanders' decision making. It does not replace the ABCS. In fact, it depends on the ABCS for the majority of its data and will continue to do so until the ABCS is replaced.

Four applications make up the CPOF:

- The MAYA CoMotion/CPOF Application (CoMotion Client) is a versatile commander's view into geospatial, temporal, and other forms of data.
- The Oculus Command Sight Application is primarily a 3-D map-based view of the area of operations.
- The Map Manager operates in the background caching imagery and map data locally, so it can feed into both the CoMotion application and the Command Sight application.
- The Ventrillo Voice Over Internet Protocol (VoIP) Client integrates with the CoMotion Client to provide seamless audio communications across multiple channels.

The CPOF is the latest trend in command and control (C2) technology, a system currently deployed at division level. CPOF enables division and brigade commanders to discuss and process information, share ideas, and attend virtual meetings without assembling at one place.

CPOF runs on a commercial off-the-shelf computer workstation with three screens that provide a shared environment that distributes, manipulates, and displays current operational information about the locations of all friendly units, known enemy forces, and relevant operational plans. Information, including images and data, is seen in two- and three-dimensions across the distributed workspace. Commanders can be better informed and make better decisions by sharing situational awareness and collaborating with headquarters.

Commanders attend a virtual meeting. They do not have to be in the same location or even the same country to discuss and draw on the same map. CPOF was developed as a technology demonstration by Defense Advanced Research Projects Agency (DARPA). DARPA is expanding the system with the introduction of advanced visualization tools, such as a multi-screen video wall, video and audio conferencing, and online collaboration tools that allow brigade commanders to communicate, collaborate, and share information.

CPOF enables forward command elements to reduce the staff required to operate C2 systems. In the distant future, advanced CPOF systems will eliminate parts of the brigade's tactical operations center (TOC). The forward and assault TOC could be transformed into virtual TOCs. CPOF relies on wideband data-communications links currently available to the Army via military and commercial satellite communications services. The commander's battle board is interfaced to the system, supporting all the communication, collaboration, and information feeds he needs.

The system is maintained as "liquid information" in a database format that separates the data from the viewing space. This method enables faster visualization and optimal maintenance of large volumes of constantly changing information. The system gathers real-time and near-real-time feeds from multiple C2 applications. Constant monitoring of the battlefield is provided by tracking the combat elements on maps or satellite photos and video feeds from battlefield sensors following enemy forces through intelligence reports, ground observations, forward units, or unmanned aerial systems. Commanders no longer have to call on the radio to check the status of each unit. CPOF supports commercial presentation-style briefings including map, photos, and video. The participants can respond and sketch out their comments on the shared battle board presented in each location and at the central CP's video wall. The Agile Commander Program provides a scalable, reconfigurable operator environment, which enables commanders to access all CP information and functions anywhere, anytime, utilizing advanced MOSAIC and global mobile networking.

CPOF provides planning and mapping tools to support the commander's battle management and information operations processes by rapidly processing and correlating combat information from all available sources. The goal of the CPOF system is to provide commanders and their staffs with an advanced distributed, collaborative decision-making environment, thus eliminating fixed CPs and enabling truly mobile, distributed commands.

CPOF is an information-centric tool that provides real-time knowledge-sharing that directly impacts team effectiveness and decision making. The highly intuitive visualizations allow officers to review each other's data quickly to support the unique demands of battlefield awareness. It achieves this by integrating CoMotion and CommandSight software technologies, providing a comprehensive workspace tool that contains frames of various sorts, such as charts, tables, and customized appliances specific to the application. Integration with existing ABCS systems, critical for providing accurate SA to CPOF operators, is achieved through the Data Bridge.

Key design principles central to the technical approach in development include:

- **Composability.** Commanders can access, view, configure, and tune data, visualizations, workspace, and processes in a way that supports their thinking. The computer is an instrument for artists (tactical) to express thoughts and understandings.
- **Collaboration.** "Topsight" provides the visualization and understanding of who is doing what in the system, allowing the command staff to better manage and share its C2 resources and expertise. While current procedures focus on course of action (COA) generation and capture in a

heavy text format, the command staff of the future will have the ability to collaboratively generate, share, and evaluate visual COAs and operation orders, maximizing the use of graphics over text.

- **Visualization.** Information is displayed in the way each commander thinks about it, with pedigree information preserving the trail of data.

CPOF capabilities include:

- SA through import and display of ABCS data, including friendly unit locations, enemy locations, and overlays.
- Shared workspaces allowing access to the information, knowledge, and insights of all users on network.
- Personal workspaces (maps, tables, charts, and other planning and analysis tools).
- Two- and three-dimensional (3-D) views of maps. The 3-D map manipulation provides rapid terrain appreciation.
- VoIP across network.
- Robust populated database.
- 3-D map time slider that allows visualization (rehearsal) of forces flowing over time.
- Powerful and efficient data distribution mechanism.
- Information liquidity that allows live data to be reassembled across network.
- Visualization products that automatically take the appropriate form.
- Distributed collaboration architecture that supports hundreds of users in real-time collaborations.
- Bi-directional communications with ABCS.
- Operation in disparate, asynchronous, communications environments.

### **Summary**

CPOF creates a commander-centric software environment that can be tailored to fit specific visualizations. This custom view supports distributed and collaborative operations that allow the commander to command anywhere on the battlefield. CPOF is designed to enable deep cohesion of thought processes between the commander and his staff. Users are able to selectively and dynamically generate and transmit evolving analysis, plans, and execution. CPOF is a comprehensible collaborative environment from the moment the system is turned on. All one has to do is drag and drop a visualization product into the “Shared Products” region and it is instantly shared.

## **Appendix B**

### **References**

- Field Manual-Interim (FMI) 2-91.4, *Intelligence Support to Operation in the Urban Environment*, Mar 05
- Field Manual (FM) 1-02, *Operational Terms and Graphics*, Sep 04
- FM 2-0, *Intelligence*, May 04
- FM 3-0, *Operations*, Jun 01
- FMI 3-90.6, *Heavy Brigade Combat Team*, Aug 06
- FM 3-06, *Urban Operations*, Jun 03
- FM 3-06.11, *Combined Arms Operations in Urban Terrain*, Feb 02
- FM 3-07, *Stability Operations and Support Operations*, Feb 03
- FM 3-24, *Counterinsurgency (COIN)*, Dec 06
- FM 3-90, *Tactics*, Jul 01
- (Draft) FM 3-90.11 (3-34.112), *Combined Arms Mobility*, Sep 05
- FM 4-0, *Combat Service Support*, Aug 03
- FM 4-01.45, *Multi-Service Tactics, Techniques, and Procedures for Tactical Convoy Operations*, Mar 05
- FM 4-30.3, *Maintenance Operations and Procedures*, Jul 04
- FM 5-0, *Army Planning and Orders Production*, Jan 05
- FM 6-0, *Mission Command: Command and Control of Army Forces*, Aug 03
- FM 7-1, *Battle Focused Training*, Sep 03
- Battle Command Training Directorate ABCS 6.4 Tool Box
- Battalion Commander's Handbook, United States Army War College (USAWC), 1996
- Staff Officer's Guide, Volume 1, S2 and S3, Army National Guard, Battle Command Training Center, Aug 06
- Staff Officer's Guide, Volume 2, S1 and S4, Army National Guard, Battle Command Training Center, Apr 07
- Improvised Explosive Device (IED) and Sniper Defeat: Battle Staff Operations Process in a Counterinsurgency (COIN) Environment, Base Battle Staff Training

## **CENTER FOR ARMY LESSONS LEARNED**

Support Package, Version 4, Combined Arms Command (CAC) Proponent, 11 Jun 07

CALL Newsletter 08-01, *Battle Tracking*, Oct 07

CALL Handbook 07-27, *Leaders' Handbook*, Jul 07

CALL Initial Impression Report (IIR) 06-25, *3rd Armored Cavalry Regiment (ACR) Operation Iraqi Freedom (OIF) Post Deployment After Action Review (AAR) Process IIR*, Jun 06

CALL Special Study 04-1, *Transforming the Tactical Staff for the 21st Century*, Part 1: The Tactical Staff, Mar 04

CALL Newsletter 03-8, *Non-Commissioned Officers (NCOs)—Cornerstone to Winning in the Contemporary Operational Environment (COE)*, Chapter 1, "Trends and Cross Trends: The Role of the NCO Corps in the COE," Mar 03

CALL Newsletter 01-15, *Joint Readiness Training Center: NCOs "Make It Happen,"* Jul 01

**PROVIDE US YOUR INPUT**

To help you access information quickly and efficiently, Center for Army Lessons Learned (CALL) posts all publications, along with numerous other useful products, on the CALL Web site. The CALL Web site is restricted to U.S. Government and allied personnel.

**PROVIDE FEEDBACK OR REQUEST INFORMATION**

**<<http://call.army.mil>>**

If you have any comments, suggestions, or requests for information (RFIs), use the following links on the CALL home page: “Request for Information or a CALL Product” or “Give Us Your Feedback.”

**PROVIDE TACTICS, TECHNIQUES, AND PROCEDURES (TTP) OR  
SUBMIT AN AFTER-ACTION REVIEW (AAR)**

If your unit has identified lessons learned or TTP or would like to submit an AAR, please contact CALL using the following information:

**Telephone: DSN 552-9569/9533; Commercial 913-684-9569/9533**

**Fax: DSN 552-4387; Commercial 913-684-4387**

**NIPR Email address: [call.rfimanager@conus.army.mil](mailto:call.rfimanager@conus.army.mil)**

**SIPR Email address: [call.rfiagent@conus.army.mil](mailto:call.rfiagent@conus.army.mil)**

**Mailing Address: Center for Army Lessons Learned, ATTN: OCC, 10 Meade Ave., Bldg 50, Fort Leavenworth, KS 66027-1350.**

**TO REQUEST COPIES OF THIS PUBLICATION**

If you would like copies of this publication, please submit your request at: <http://call.army.mil>. Use the “Request for Information or a CALL Product” link. Please fill in all the information, including your unit name and official military address. Please include building number and street for military posts.

**PRODUCTS AVAILABLE "ONLINE"**

**CENTER FOR ARMY LESSONS LEARNED (CALL)**

Access and download information from CALL's Web site. CALL also offers Web-based access to the CALL Archives. The CALL home page address is:

<<http://call.army.mil>>

CALL produces the following publications on a variety of subjects:

- **Combat Training Center Bulletins, Newsletters, and Trends**
- **Special Editions**
- *News From the Front*
- **Training Techniques**
- **Handbooks**
- **Initial Impressions Reports**

You may request these publications by using the "Request for Information or a CALL Product" link on the CALL home page.

**COMBINED ARMS CENTER (CAC)  
Additional Publications and Resources**

The CAC home page address is:

<<http://www.leavenworth.army.mil>>

**Battle Command Knowledge System (BCKS)**

BCKS supports the online generation, application, management, and exploitation of Army knowledge to foster collaboration among Soldiers and units in order to share expertise and experience, facilitate leader development and intuitive decision making, and support the development of organizations and teams. Find BCKS at <<http://usacac.army.mil/CAC/bcks/index.asp>>.

**Center for Army Leadership (CAL)**

CAL plans and programs leadership instruction, doctrine, and research. CAL integrates and synchronizes the Professional Military Education Systems and Civilian Education System. Find CAL products at <<http://usacac.army.mil/CAC/CAL/index.asp>>.

**Combat Studies Institute (CSI)**

CSI is a military history "think tank" that produces timely and relevant military history and contemporary operational history. Find CSI products at <<http://usacac.army.mil/CAC/csi/RandP/CSIPubs.asp>>.

### **Combined Arms Center-Training: The Road to Deployment**

This site provides brigade combat teams, divisions, and support brigades the latest road to deployment information. This site also includes U.S. Forces Command's latest training guidance and most current Battle Command Training Program COIN seminars. Find The Road to Deployment at <<http://rtd.leavenworth.army.smil.mil>>.

### **Combined Arms Doctrine Directorate (CADD)**

CADD develops, writes, and updates Army doctrine at the corps and division level. Find the doctrinal publications at either the Army Publishing Directorate (APD) <<http://www.usapa.army.mil>> or the Reimer Digital Library <<http://www.adtdl.army.mil>>.

### **Foreign Military Studies Office (FMSO)**

FMSO is a research and analysis center on Fort Leavenworth under the TRADOC G-2. FMSO manages and conducts analytical programs focused on emerging and asymmetric threats, regional military and security developments, and other issues that define evolving operational environments around the world. Find FMSO products at <<http://fmso.leavenworth.army.mil/recent.htm>> or <<http://fmso.leavenworth.army.mil/products.htm>>.

### **Military Review (MR)**

MR is a refereed journal that provides a forum for original thought and debate on the art and science of land warfare and other issues of current interest to the U.S. Army and the Department of Defense. Find MR at <<http://usacac.leavenworth.army.mil/CAC/milreview>>.

### **TRADOC Intelligence Support Activity (TRISA)**

TRISA is a field agency of the TRADOC G2 and a tenant organization on Fort Leavenworth. TRISA is responsible for the development of intelligence products to support the policy-making, training, combat development, models, and simulations arenas. Find TRISA Threats at <<https://dcsint-threats.leavenworth.army.mil/default.aspx>> (requires AKO password and ID).

### **United States Army Information Operations Proponent (USAIOP)**

USAIOP is responsible for developing and documenting all IO requirements for doctrine, organization, training, materiel, leadership and education, personnel, and facilities; managing the eight personnel lifecycles for officers in the IO functional area; and coordinating and teaching the qualification course for information operations officers. Find USAIOP at <<http://usacac.army.mil/CAC/usaio.asp>>.

*Support CAC in the exchange of information by telling us about your successes so they may be shared and become Army successes.*

# Center for Army Lessons Learned

10 Meade Avenue, Building 50  
Fort Leavenworth, KS 66027-1350



*Combined Arms Center (CAC)*  
*Ft. Leavenworth, KS*



U.S. UNCLASSIFIED  
REL NATO, GCTF, ISAF, MCFI, ABCA  
For Official Use Only