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CTC OBSERVATIONS

3rd and 4th Quarters, FY2015

Lessons and Best Practices

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CTC Observations
3rd and 4th Quarters, FY2015

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Introduction

(U) The implementation of unified land operations in a decisive action training environment (DATE) began in earnest in 2012, when the National Training Center hosted the first DATE rotation at a combat training center (CTC). A DATE rotation at the Joint Readiness Training Center followed, as did DATE rotations at the Joint Multinational Readiness Center and the Mission Command Training Program. The CTCs have conducted DATE rotations since then, steadily improving the quality of the training experience.

(U) This CTC Observations Bulletin contains significant observations and associated best practices from DATE rotations for the last two quarters of fiscal year (FY) 2015. This publication is the continuation of Center for Army Lessons Learned (CALL) newsletters started in the mid-1990s. It joins CTC Observations Bulletin 16-03, covering the first and second quarters of FY 2015, in a new series of CALL publications. CALL collects observations, best practices, and training results from observer-coach/trainers at the CTCs and compiles the information in a publication every six months. Analysis of CTC observations over time can identify trends. A trend is defined in Army Regulation 11-33, Army Lessons Learned Program, as an identified issue or best practice supported by three or more observations from multiple sources within a reasonable period. The observations contained in this bulletin will contribute to the identification of decisive action training trends.

(U) Organized by warfighting function, these CTC observations reflect both positive performance (sustains) and areas that need emphasis (improves). CTC observations and best practices contribute to the Army as a learning organization and provide the following:

- Units receive a reference for training emphasis at home station.
- Doctrine writers and training developers receive successful techniques, identified gaps in capability, and research material as they update doctrine, organization, training, materiel, leadership, or facilities.

Chapter 1

Common Observations

(U) Common observations apply to most units and Soldiers, regardless of the particular type of unit or military occupational specialty. These common observations are drawn from the overall observations identified during training at the combat training centers (CTCs). Observations may be identified from any of the warfighting functions.

(U) Decisive action has two core competencies: wide area security and combined arms maneuver. The CTCs offer the most realistic and challenging training opportunity for combined arms maneuver at the brigade level and below.

(U) Rehearsals

(FOUO) The need to conduct rehearsals or improve them is mentioned in 25 of the observations identified by the maneuver CTCs for this publication. There are five observations specifically about rehearsals: two sustains and three improves. During the past decade-plus of counterinsurgency (COIN) operations in Iraq and Afghanistan, units learned to conduct effective rehearsals for operations. In that environment, units did not always face the time constraints that units now face during a rotation at a CTC. For instance, if the unit was not prepared and the mission was not time sensitive, the operation was delayed a couple of days to allow more time to prepare and deconflict resource issues. Unfortunately, this usually is not the case in DATE rotations; units sometimes conduct hasty rehearsals that are more akin to back briefs. For a unit to have the ability to conduct the operations process in a timely manner, practice makes perfect. This can be achieved through command post exercises, leader professional development sessions, and repetitions at home station.

(FOUO) **ANALYST NOTE**: Use the following link to the Center for Army Lessons Learned (CALL) restricted site (CAC login required) to view videos of rehearsals: https://call2.army.mil/ctc/CTC_MC.aspx. More videos are available from the Army Training Network under "CTC Training Videos" at the following link: https://atn.army.mil/dsp_videoPortal.aspx.

(U) Sustains

(U) OBSERVATION: Rotational units have improved their preparation for execution of operations. **Go to Page 8**

(U) OBSERVATION: Successful units conduct quality rehearsals at the platoon and squad levels. **Go to Page 10**

(U) Improves

(U) OBSERVATION: Fire support rehearsals are effective if properly conducted prior to the combined arms rehearsal. **Go to Page 38**

(FOUO) OBSERVATION: Fires rehearsals, as well as fire support technical rehearsals, often are not completed or merely become enhanced back briefs to the brigade combat team (BCT) and field artillery battalion commanders. **Go to Page 88**

(U) OBSERVATION: Units are challenged in conducting effective fire support rehearsals. **Go to Page 81**

(U) Enabler Integration

(FOUO) Another area that poses a challenge to BCT and battalion staffs is the integration of enablers and effective use of enablers to contribute to the fight. (**ANALYST NOTE**: Most of the integration issues listed below also are discussed in the section on command and control in CALL publication 02-5, *CTC Trends: Joint Readiness Training Center, 4QFY00 and 1QFY01*, at the following link: https://call2.army.mil/toc.aspx?chapter=2520&live=1.) Understanding enabler capabilities and then integrating them into the fight has always been a challenge and depends on the capabilities of the leaders of the enabler unit and the staff officer responsible for integrating them. If these officers or noncommissioned officers have not been adequately trained, the chances of successful integration are low. This area continues to present a challenge; improvement will require leadership and institutional emphasis.

(U) Sustains

(U) OBSERVATION: Military police combat support companies are conducting successful detention operations in support of BCTs during decisive action operations at the National Training Center. **Go to Page 93**

(U) OBSERVATION: Explosive ordnance disposal companies provide one to two teams with route clearance patrols during task force operations lanes and decisive action training environments. **Go to Page 93**

(U) Improves

(U) OBSERVATION: Some units are unable to integrate enablers into execution of movement control nodes. **Go to Page 70**

(U) OBSERVATION: By committing a significant portion of the military police company to detention operations, the brigade significantly hinders its military police combat power. **Go to Page 40**

(U) OBSERVATION: Commanders of brigade engineering battalions and brigade special troops battalions do not effectively advise BCT commanders and brigade staffs on enablers. **Go to Page 34**

(U) OBSERVATION: Understanding unit capabilities and limitations is very important in a multinational environment. **Go to Page 16**

(FOUO) OBSERVATION: Units are challenged in integrating multinational units into logistical support requirements. **Go to Page 113**

(U) Military Decisionmaking Process and Troop Leading Procedures

(FOUO) Another factor that hinders units' mission accomplishment at a CTC is lack of an effective military decisionmaking process (MDMP) and effective troop leading procedures (TLPs). As with lack of effective rehearsals, this has been a challenge since before 9/11 and is best trained through repetition and leader emphasis. Doing this in a time-constrained environment and on a larger scale represents a change from how the Army conducted military decision making during COIN operations for the past decade-plus. Units that conduct MDMP typically are better able to execute the rapid decision-making process sometimes required at the CTCs.

(U) **ANALYST NOTE**: Units and individuals can utilize CALL Handbook 15-06, *MDMP Lessons and Best Practices*, to gain a better understanding of conducting the military decisionmaking process. It is available for electronic download at the following link: https://call2.army.mil/toc.aspx?document=7288&filename=/docs/doc7288/15-06.pdf. Hard copies may be ordered from the CALL restricted site at the following link (CAC login required; enter MDMP in the Title Search field): https://call2.army.mil/rfp/default.aspx

(U) Improves

(U) OBSERVATION: Units are challenged in executing all steps of MDMP. **Go to Page 33**

(U) OBSERVATION: Brigade combat team fires cells struggle to doctrinally integrate fires and targeting into the BCT fight. **Go to Page 82**

(U) OBSERVATION: In a phased operation during force on force, units struggle to manage their time and execute a deliberate MDMP. **Go to Page 38**

(U) OBSERVATION: Units often fail to incorporate intelligence preparation of the battlefield into their scheme of maneuver. **Go to Page 52**

(U) OBSERVATION: Brigade combat teams sometimes fail to conduct detailed sustainment planning. **Go to Page 105**

(U) OBSERVATION: Running estimates often are not sufficiently developed or maintained. **Go to Page 24**

(U) OBSERVATION: Units struggle to effectively implement TLPs as they prepare for tactical convoy operations. **Go to Page 70**

(U) OBSERVATION: Units often conduct poor planning and rehearsals as a result of ineffective time management. **Go to Page 41**

(U) Fire Support

(FOUO) Fires units and staff sections are also challenged in the decisive action environment at the CTC after years of fighting in a COIN operational environment. These challenges often are noted in how targeting is integrated into MDMP and in the refinement planning necessary for sensor-to-shooter linkage to provide effective fires in a timely manner. Artillery units have difficulty accomplishing their mission if the targeting working group is ineffective in planning, units do not utilize all of their digital equipment, and fire support rehearsals are not rigorous.

(U) **ANALYST NOTE**: The Fires Web page on the CALL CTC site has information and videos to help fire support personnel conduct more effective home station training: https://call2.army.mil/ctc/CTC_Fires.aspx. Products on this page include JRTC videos "Fire Support Targeting Working Group 'A Way' " and "BCT Fire Support Rehearsal 'A Way' " along with CALL Handbooks 13-07, *Fires Rehearsals*; 13-08, *Mortars*; 13-20, *MDMP and the Field Artillery Support Plan*; and 12-02, *Joint Fires Observer for the Maneuver Commander and Staffs*.

(U) Improves

(U) OBSERVATION: Units are challenged in conducting effective targeting meetings. **Go to Page 80**

(U) OBSERVATION: Units are challenged in conducting effective fire support rehearsals. **Go to Page 81**

(U) OBSERVATION: Brigade combat team fires cells struggle to doctrinally integrate fires and targeting into the BCT fight. **Go to Page 82**

(U) OBSERVATION: Fires rehearsals, as well as fire support technical rehearsals, often are not completed or become merely enhanced back briefs to the BCT and field artillery battalion commanders. **Go to Page 88**

(U) OBSERVATION: Units need to improve fire support planning. **Go to Page 79**

(U) OBSERVATION: Field artillery survey teams lack guidance and leadership at the battery and battalion levels for coordinating survey efforts to provide support across the battlefield for all firing batteries. **Go to Page 87**

(U) OBSERVATION: Units rarely meet all five requirements when replicating fires because they struggle with using the Global Broadcast System (GBS) for meteorological data. **Go to Page 88**

(U) Home Station Training and Soldier Skills

(FOUO) A lack of effective home station training on basic Soldier skills hinders unit readiness because units must spend valuable training time during their CTC rotation learning and relearning individual skills.

(U) **ANALYST NOTE**: CALL will soon publish a home station training initial impressions report and will produce a home station training newsletter at the end of Fiscal Year (FY) 2016. The United States Forces Command FY16 Training Guidance provides a guidance on training at home station before executing a CTC rotation.

(U) Improves

(U) OBSERVATION: The construction of proper fighting positions appears to be a dying art, as coaching has often been required to bring units up to standard on this basic Soldier task. **Go to Page 100**

(FOUO) OBSERVATION: Soldiers do not properly train at home station on their systems and equipment. As a result, contractor support is required at the CTC and training time is taken away from the rotational unit to get its systems operational in support of the brigade mission. **Go to Page 46**

Chapter 2

Mission Command

(U) Sustains

(U) Sustain OBSERVATION 1

(U) SUBJECT: Functions of the main command post

(FOUO) OBSERVATION: Successful units developed and executed two-minute drills.

(FOUO) DISCUSSION: Command post (CP) two-minute drills are an effective way to focus the current operations (CUOPs) cell during missions. Continue event- and time-driven "huddles" to enhance situational awareness and understanding within the entire main CP and to help anticipate unit requirements and commander decisions.

(FOUO) TECHNIQUES AND PROCEDURES: There are some considerations for executing a two-minute drill. During initial announcement, the battle captain can give specific focus areas or questions he wants answered or discussed. Briefers should focus on briefing updates to running estimates and status without going into a lot of explanation. Briefers should analyze rather than regurgitate existing data.

(U) Army Tactical Task (ART) 5.2, Conduct Command Post Operations

(U) SOURCE: Joint Readiness Training Center (JRTC)

(U) Sustain OBSERVATION 2

(U) SUBJECT: Use of digital communications

(FOUO) OBSERVATION: Units that use Transverse-like systems as a primary method of communication enable shared understanding and situational awareness.

(FOUO) DISCUSSION: The use of digital communications systems enables a broad spectrum of information sharing with real-time updates. Units with digital communications capabilities like Transverse have had greater situational understanding of the current operations fight.

(FOUO) TECHNIQUES AND PROCEDURES: Standard operating procedures (SOPs) should be developed for the main CP covering the use of digital communications. Develop functional area chat windows to de-clutter operations chat windows. Require all participants on the CUOPs floor to maintain awareness of the windows being utilized, and enforce subordinate unit use of those windows.

(U) ART 5.1.3, Execute Tactical Operations

(U) SOURCE: JRTC

(U) Sustain OBSERVATION 3 Return to Common Observations

(U) SUBJECT: Conducting rehearsals

(FOUO) OBSERVATION: Rotational units have improved their preparation for the execution of operations.

(FOUO) DISCUSSION: In preparation for a joint forcible entry, rotational units conducted combined arms rehearsals (CARs) that followed the execution checklist closely through the operation. This allowed brigade combat team (BCT) commanders and staffs to brief unit task, purpose, and orientation in space and time. Units were coached to improve their level of detail included in the CAR to improve shared understanding and synchronize often-overlooked critical details such as logistics, medical evacuation, gun target lines, airspace management, and branch plans. Overall, rotational units understand the importance of preparation and rehearsals.

(U) "A rehearsal is a session in which the commander and staff or unit practice expected actions to improve performance during execution. Commanders use this tool to ensure staffs and subordinates understand the concept of operations and commander's intent. Rehearsals also allow leaders to practice synchronizing operations at times and places critical to mission accomplishment. Effective rehearsals imprint a mental picture of the sequence of the operation's key actions and improve mutual understanding and coordination of subordinate and supporting leaders and units. The extent of rehearsals depends on available time. In cases of short-notice requirements, detailed rehearsals may not be possible." (Army Doctrine Reference Publication [ADRP] 5-0, *The Operations Process*, para. 3-17)

(U) TECHNIQUES AND PROCEDURES: The 17 preparation activities of the operations process are described in Chapter 3 of ADRP 5-0. A robust CAR is critical to the success of complex operations like airborne assaults. Accordingly, the utility of this process depends on its ability to communicate a mental picture of the operation.

(U) ART 5.1.2, Prepare for Tactical Operations

(U) SOURCE: JRTC

(U) Sustain OBSERVATION 4

(U) SUBJECT: Segregation of the future and current operations (FUOPS/CUOPS) sections

(U) OBSERVATION: Successful battalions (BNs) man both the FUOPS and CUOPS sections with a representative from each staff section whose focus is either supporting the current fight or planning future missions.

(U) DISCUSSION: Successful units have placed a captain in charge of each function, with CUOPS reporting to the battalion executive officer and FUOPS reporting to the battalion S-3. Successful tactics, techniques, and procedures (TTPs) include clearly delineating responsibility and defining the point at which responsibility for an operation transitions from FUOPs to CUOPS.

(U) Discrete CUOPS and FUOPS manning allows units to parallel-plan at the battalion level, coordinate future mission requirements, and simultaneously battle-track and synchronize current operations without borrowing manpower from the military decisionmaking process (MDMP). The compressed timeline at a combat training center (CTC) will punish units that do not have a disciplined process for planning future operations while current operations are conducted.

(U) The FUOPS cell "is responsible for planning operations in the mid-range planning horizon. It focuses on adjustments to the current operation — including the positioning or maneuvering of forces in depth that facilitates continuation of the current operation," while the CUOPS cell is the "focal point for the execution of the operations, [which] involves assessing the current situation while regulating forces and warfighting functions in accordance with the mission, commander's intent, and concept of operations." (Field Manual [FM] 6-0, *Command and Staff Organization and Operations*, paragraphs 1-42 and 1-44)

(U) By manning both cells with competent, trained personnel, units are better prepared to handle an increased operational tempo and facilitate MDMP while concurrently overseeing the standard shift-change and synchronization meetings, maintaining the common operational picture (COP), and answering brigade-level requests for information (RFIs).

(U) TECHNIQUES AND PROCEDURES: The duties and responsibilities of the FUOPS and CUOPS cells are outlined in FM 6-0.

(U) ART 5.2, Conduct Command Post Operations

(U) SOURCE: JRTC

(U) Sustain OBSERVATION 5

(U) SUBJECT: Information dissemination at the company and platoon

(FOUO) OBSERVATION: During rotations, lower-level leaders disseminated information to the lowest levels.

(FOUO) DISCUSSION: During rotations, leaders have focused on information dissemination to the Soldier level. With the difficulty of the operational environment (OE) and distance between platoons, commanders have been forced to disseminate information to platoon leaders and platoon sergeants via FM communications and Capability Set 14 (CS-14). Commanders and platoon leaders in rotations during a recent quarter provided not only current updates to the operation, but also provided the latest enemy composition/disposition to the Soldier level.

(FOUO) TECHNIQUES AND PROCEDURES: Typically, leaders who emphasize information dissemination and spot-check their Soldiers at JRTC are able to maintain shared understanding at the squad and team leader levels. If lower-level leaders understand the tactical concept of operations of the mission and the commander's intent, they are able to make informed, timely decisions based on the given OE and enemy.

(FOUO) Leaders can employ an effective command post to create a shared understanding and disseminate information throughout the entire company. (FM 3-21.10, *The Infantry Rifle Company*) The command post can serve as the central point for information and should be able to operate when the commander is not present.

(U) ART 5.2, Conduct Command Post Operations

(U) SOURCE: JRTC

(U) Sustain OBSERVATION 6

(U) SUBJECT: Use of weapons company in sections or platoons

(FOUO) OBSERVATION: Rotational units consistently move their weapons company by section or platoon to take advantage of faster movement, better security, and more dispersion.

(U) DISCUSSION: The weapons company has been observed in many different task organizations. Generally, however, the battalion splits up the company and, as a result, platoons or sections move independently around the battlefield.

(U) TECHNIQUES AND PROCEDURES: The following are advantages of dividing the weapons company into smaller echelons:

- A small unit is less likely to be detected and requires less cover and concealment to protect itself against enemy effects.
- The split into smaller echelons makes it more difficult for the enemy to concentrate his fires against the company.
- Smaller echelons are faster and more maneuverable.

(U) ART 5.1.2, Prepare for Tactical Operations

(U) SOURCE: JRTC

(U) Sustain OBSERVATION 7 Return to Common Observations

(U) SUBJECT: Rehearsals at the platoon and squad levels

(U) OBSERVATION: Successful units conduct quality rehearsals at the platoon and squad levels.

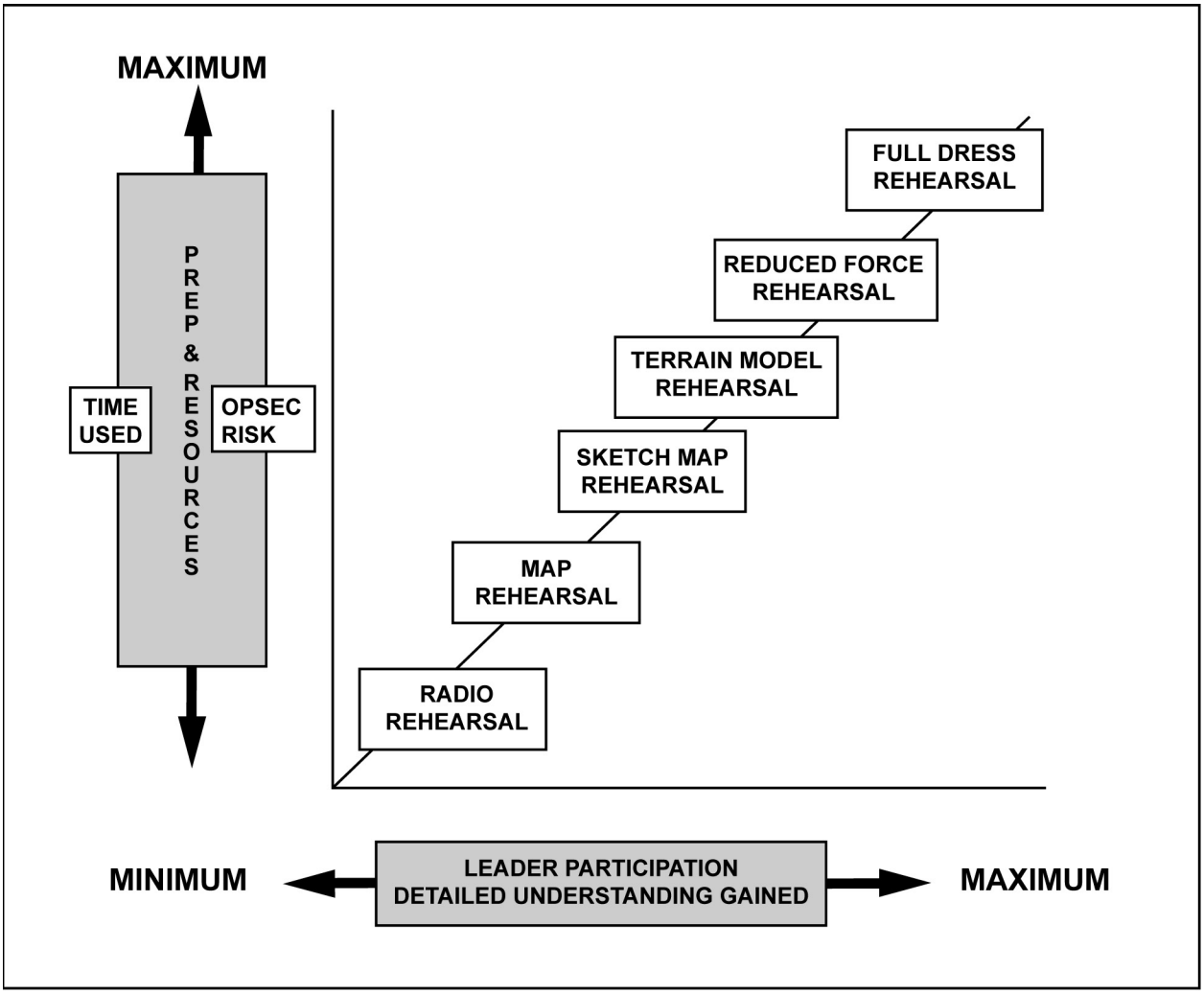
(U) DISCUSSION: Platoon leaders and platoon sergeants who understand which rehearsals are needed to accomplish the commander's intent increase the likelihood for mission success. (See Figure 2-1, next page) Platoon leaders, platoon sergeants, and squad leaders understand the need for rehearsals at the platoon, squad, and individual levels. At the initial staging base (ISB) prior to entry operations, squads and teams have the opportunity to conduct great rehearsals in preparation for the mission. This enables junior leaders to better understand the initial phases of the operation and rehearse key tasks in that operation.

(U) TECHNIQUES AND PROCEDURES: Training focused on conducting standard rehearsals early in troop leading procedures (TLPs) will help squads prepare for most operations when given a clear task and purpose. Once the operation order (OPORD) has been issued, leaders can issue the rehearsal priorities and guidance to ensure that rehearsals are focused on specific tasks and account for coordination measures such as phase lines and building numbers.

(U) Further performance measures and steps for conducting rehearsals can be found under Task 07-2-5009, Conduct a Rehearsal (Platoon–Company), and Task 71-8-5122, Perform a Rehearsal (Battalion–Corps), on the Army Training Network.

(U) ART 5.1.2.2, Perform Rehearsals

(U) SOURCE: JRTC



(U) Figure 2-1. Types of rehearsals. (Source: FM 6-0)

(U) Sustain OBSERVATION 8

(U) SUBJECT: Use of the administrative and logistics center (ALOC) as an alternate main command post (CP)

(FOUO) OBSERVATION: Units are doing well in establishing, resourcing, and manning their battalion ALOCs for their primary purpose as well as their secondary role of serving as an alternate main CP.

(FOUO) DISCUSSION: Battalion (BN) executive officers (XOs) have made considerable effort to ensure that proper manning, communication assets, and battle-tracking systems are present and employed in the ALOCs. Although this step forward does not fix all mission command issues, it has proven effective in supporting the BN main CP when the tactical command post (TAC) is deployed forward. On several instances, the battle-tracking efforts in the BN ALOC proved to be not only effective, but more accurate and more responsive than the systems emplaced in the BN main CP. This was not due to poor systems or lack of abilities within the BN main CP, but rather better communication due to a better line of sight with the BN TAC.

(U) TECHNIQUES AND PROCEDURES: The duties and responsibilities of the ALOC are outlined in FM 6-0.

(U) ART 5.2, Conduct Command Post Operations

(U) SOURCE: JRTC

(U) Sustain OBSERVATION 9

(U) SUBJECT: Establishing and following a battle rhythm

(FOUO) OBSERVATION: Units that establish a battle rhythm early during operations succeed in planning and keep all commanders informed.

(FOUO) DISCUSSION: Army Doctrine Reference Publication (ADRP) 5-0, *The Operations Process*, para. 1-65, states: "Within the operations process, commanders and staffs must integrate and synchronize numerous activities, meetings, and reports within their headquarters, with their higher headquarters, and with subordinate units. They do this by establishing the unit's battle rhythm. Battle rhythm is a deliberate daily cycle of command, staff, and unit activities intended to synchronize current and future operations. [Joint Publication 3-33, *Joint Task Force Headquarters*] The unit's battle rhythm sequences the actions and events within a headquarters that are regulated by the flow and sharing of information that support decision making. An effective battle rhythm establishes a routine for staff interaction and coordination; facilitates interaction between the commander, staff, and subordinate units; [and] facilitates planning by the staff and decision making by the commander."

(U) TECHNIQUES AND PROCEDURES: Successful units establish and follow the battle rhythm as well as make necessary adjustments to it as operations continue. Lower echelons remain better informed and tied into their higher headquarters for both current and future operations compared with units that do not.

(U) ART 5.2, Conduct Command Post Operations

(U) SOURCE: JRTC

(U) Sustain OBSERVATION 10

(U) SUBJECT: Use of mission command systems

(FOUO) OBSERVATION: The use of mission command systems, specifically joint capabilities release (JCR), continues to be a key part of each unit's primary, alternate, contingency, and emergency (PACE) plan.

(FOUO) DISCUSSION: The use of JCR allows units to overcome the challenges of tactical satellite band availability and frequency modulation (FM) ranges without retransmission. Units depend on JCR during rotations for message traffic and situational awareness. Although units are quick to use JCR, they are not using all of its capabilities, specifically the ability to send operational graphics; call for fire; sustainment reports; and SALUTE (size, activity, location, unit, time, and equipment) reports.

(U) TECHNIQUES AND PROCEDURES: From Army Techniques Publication (ATP) 6-01.1, *Techniques for Effective Knowledge Management*, para. C-18: "Force XXI Battle Command Brigade-and-Below joint capabilities release (JCR) is the Army's next generation friendly force tracking system currently fielding to Afghanistan. This upgrade builds on the situational

awareness tool Force XXI Battle Command Brigade and Below/Blue Force Tracking, which is integrated on more than 120,000 platforms and fielded to every brigade combat team (BCT) in the Army. Force XXI Battle Command Brigade-and-Below is a digital mission command information system providing integrated, timely, relevant information to tactical combat leaders and Soldiers from brigade to platform and across platforms within the brigade task force. Force XXI Battle Command Brigade-and-Below has both 'on-the-halt' and 'on-the-move' over-the-horizon capability. It allows warfighters to pass orders and graphics to visualize the commander's intent and scheme of maneuver. Force XXI Battle Command Brigade-and-Below is a key component of the Army Battle Command System. Operational graphics must be loaded, and operators must understand graphic symbology and standardization across all platforms. Force XXI Battle Command Brigade-and-Below provides near-real-time, platform-level friendly situational awareness and provides the ability to exercise small-unit battle command. [The] JCR update speeds information updates through the Blue Force Tracking 2 satellite network, which handles significantly more data than the first Blue Force Tracking. JCR also premieres JCR-Logistics, providing seamless, two-way situational awareness and message exchange between convoys and the maneuver formations to which they are delivering goods."

(U) Continue to learn and utilize the full JCR system. Send operators and supervisors to digital master gunner courses.

(U) **ANALYST NOTE**: The following link provides information on the Mission Command Digital Master Gunner Course (MCDMGC) offered by the Mission Command Center of Excellence at Fort Leavenworth, KS: http://usacac.army.mil/organizations/mccoe/dots/mission-command-master-gunner. The site contains tabs for course information, course materials, ABCS quick reference guides, and digital training tables. Use the following link to read more about the course in the Army Training Requirements and Resources System (ATRRS): https://atrrs.army.mil/atrrscc/courseInfo.aspx?fy=2016&sch=150&crs=9E-SI%2fASI5C%2f920-ASI5C(CT)&crstitle=MISSION+COMMAND+DIGITAL+MASTER+GUNNER&phase=. Units that have MCDMGC graduates in their command posts have demonstrated better use of their mission command systems in executing command post tasks and enabling commanders in their decision making.

(U) ART 5.3, Conduct Knowledge Management and Information Management

(U) SOURCE: JRTC

(U) Sustain OBSERVATION 11

(U) SUBJECT: Hasty mission planning for air assault operations

(FOUO) OBSERVATION: Successful assault and heavy helicopter companies execute hasty mission planning well and have processes and procedures for production of hasty mission products.

(FOUO) DISCUSSION: In the decisive action environment, the mission planning window for deliberate air assaults is often less than 48 hours and sometimes less than 24. FM 3-99, *Airborne and Air Assault Operations*, para. 9-13, states: "Successful execution of an air assault in a time-constrained environment requires parallel and collaborative planning by all units and staffs that are part of or supporting the air assault task force (AATF)." In order to start mission planning, the initial planning conference needs to discuss minimum critical information such as the objective,

anticipated force to be moved, and the timeframe. It is imperative that the ground and aviation units both understand the outputs of the air mission coordination meeting. Aviation planners must walk away from this meeting with the concept of ground tactical plan, finalized air movement plan, landing plan, air routes, pickup zones, and landing zones.

(U) Per FM 3-99, "to save time by reducing the number of meetings, specific portions of the air mission brief are included in the AATF OPORD brief in lieu of doing a separate air mission brief." Back briefs, aircrew briefs, and rehearsals are still conducted by units of the AATF. The specific portions of the air mission brief included in the OPORD brief are:

- Staging plan
- Air movement plan
- Landing plan
- Attack reconnaissance coverage
- Landing zone condition criteria
- Weather decision
- Risk assessment

(U) Mission success requires detailed planning; a PACE plan for communication; execution of TLPs at the company level; mission-level contingency planning; and an aviation task force rehearsal to validate synchronization.

(U) TECHNIQUES AND PROCEDURES: Refer to FM 3-99 for additional information on air assault operations. A well-disciplined aviation task force arrives at JRTC with a good understanding of the air assault planning process and MDMP. These standards should be codified in tactical standard operating procedures (TACSOPs) and executed much like a battle drill. Great products were developed during the past 14 years of counterinsurgency operations, and continue to be developed; we cannot lose these as we transition the fight to a decisive action environment. Specific TTPs, or products, include a terrain model kit that works in the field; an off-the-shelf execution checklist; acetated fill-in-the-blank communications cards; a crew brief checklist that covers a five-paragraph OPORD; and a checklist that covers minimum mission-essential information and mission planning software present at the air mission coordination meeting to provide feedback to the ground force.

(U) ART 1.2.1.1.2, Conduct an Air Assault

(U) SOURCE: JRTC

(U) Sustain OBSERVATION 12

(U) SUBJECT: Aviation task force command post operations

(FOUO) OBSERVATION: Aviation task forces were able to have a functional CP with the use of Blue Force Tracking (BFT) and FM communications.

(FOUO) DISCUSSION: Some CPs lacked Jabber and secure voice over Internet protocol (SVOIP) communications, which hindered their operation slightly because they lacked overall visibility of operations. Units routinely emphasized the importance of having a SECRET Internet Protocol Router Network (SIPRNET) line run to their CP so their radio telephone operator (RTO) could monitor incoming missions and maintain situational awareness within the area of operations (AO). Some units were not able to collocate with the main CP to have direct access to a SIPRNET line. Communications established in the CP via Jabber, SVOIP, BFT, and FM can greatly reduce notification and response times. Most units quickly had a CP with mission tracking, maintenance tracking, and communications with the main CP and the company's aircraft.

(FOUO) TECHNIQUES AND PROCEDURES: The following are recommended:

- Continue to maintain focus on CP operations: receive information, analyze information, synchronize resources, integrate resources, distribute information to lower levels, and submit recommendations to the commander.
- Continue to adequately man the CP with trained personnel and leadership.
- Continue to deploy with working equipment that can increase the unit's situational awareness.
- Continue to track maintenance and schedules on large white boards that can easily be updated and viewed.
- Ensure that commander's critical information requirements, serious incident reports, the mission statement, and commander's intent are posted and disseminated to the lowest level.

(U) ART 5.2.1.1, Organize People, Information Management Procedures, and Equipment and Facilities

(U) SOURCE: National Training Center (NTC)

(U) Sustain OBSERVATION 13

(U) SUBJECT: Use of combat net radio

(U) OBSERVATION: Divisions are planning and establishing the combat net radio (CNR) network during exercises.

(U) DISCUSSION: Utilizing the CNR to its full capabilities, which include the single-channel ground and airborne radio system (SINCGARS), high frequency (HF), and tactical satellite (TACSAT), provides the division with redundant communications.

(U) TECHNIQUES AND PROCEDURES: Continue to use the CNR network to fully support mission command.

(U) ART 5.2.1, Conduct Command Post Operations to Support Tactical Operations

(U) SOURCE: Mission Command Training Program (MCTP)

(U) Improves

(U) Improve OBSERVATION 1

(U) Subject: Common operational picture (COP)

(U) OBSERVATION: The COP does not facilitate shared understanding between the staffs in each of the command posts (tactical and main).

(U) DISCUSSION: The COP did not depict threat or U.S. special forces positions, nor did it routinely depict maneuver graphics or any obstacle graphics. This lack of situational awareness contributed to a simulated fratricide.

(U) TECHNIQUES AND PROCEDURES: The chief of operations, G-3, G-2, and division engineer should collaborate on what the COP needs to include in order to provide sufficient situational awareness to subordinate elements, divisional staff, and the commander. This model COP then would be presented to the chief of staff or other authority for final adjustments and approval. Implementing these changes would focus the staff on the required information for a COP that will facilitate shared understanding throughout the staffs in the division CPs.

(U) ART 5.1.4, Assess Tactical Situations and Operations

(U) SOURCE: MCTP

(U) Improve OBSERVATION 2 Return to Common Observations

(U) SUBJECT: Unit capabilities and limitations

(U) OBSERVATION: Understanding unit capabilities and limitations is very important in a multinational environment.

(U) DISCUSSION: Units that have never worked together before require time to develop relationships; learn the capabilities and limitations of one another's equipment and weapon systems; understand their respective TTPs; and implement and practice common standards, procedures, and tactics. Units also must develop common casualty treatment and evacuation methods and viable sustainment plans (concepts of support) for all classes of supply. This is especially important in a multinational organization.

(U) Failing to understand all aspects of partner forces degrades tempo, flexibility, and agility. It also increases the risk of fratricide and exploitation by enemy maneuver/effects.

(U) Sustainment for multinational forces can be difficult, as each country has its own sustainment systems. Repair parts, ammunition, and fuel resupply are challenging for units in a multinational organization, and sustainment procedures must be planned and coordinated.

(U) TECHNIQUES AND PROCEDURES: Understanding the capabilities of partner forces must be a formal, structured process supervised by unit leaders. Units should plan and execute the process any time the task organization changes. Prevention of fratricide is a primary concern; focus areas are vehicle and uniform recognition.

(U) Units should develop integration plans for how they will receive and integrate partner forces into their commands. The integration plan should start with basic life support, followed by a sustainment plan, a communications plan, and common procedures and tactics. Units should develop an integration checklist that details every task units must accomplish with new partner forces or assets prior to conducting operations.

(U) Integration of partner units should begin as soon as multinational partners arrive. Face-to-face contact is the preferred method for initial contact, and commanders should make themselves available to meet their subordinate commanders as soon as possible.

(U) Several techniques have been effective in sharing unit capabilities and limitations, including the following:

- Establish warfighting function groups to discuss and resolve interoperability issues.
- Allow time to get to know individual leaders on a personal basis.
- Give each unit a briefing role in commander's update briefings.
- Ensure that the brigade staff includes every partner country (regardless of size) in running estimates and staff update briefings.
- Have each unit prepare a unit capabilities briefing to deliver to command groups and brigade/battalion staff.
- Review and update SOPs to ensure ease of translation and resolve issues.
- Have partner forces visit one another and become familiar with vehicles and weapons.
- Enforce collaborative planning with subordinate units.
- Make time for detailed, one-on-one back briefs with unit commanders.

(U) ART 5.1.2.1, Establish Coordination and Liaison

(U) SOURCE: Joint Multinational Readiness Center (JMRC)

(U) Improve OBSERVATION 3

(U) SUBJECT: Knowledge management (KM) tools to foster shared understanding

(U) OBSERVATION: The division staff used multiple collaborative tools and struggled with managing those tools.

(U) DISCUSSION: The division staff lost productivity due to the amount of time spent searching for division products created on multiple collaborative tools and sorting through issues with version control. The staff also demonstrated a lack of training on some of the Army Battle Command System tools. For example, the sustainment cell's lack of expertise on Command Post of the Future (CPOF) and the Battle Command Sustainment Support System (BCS3) caused sustainers to create PowerPoint products instead of CPOF baseboards. Additionally, the sustainers emailed the products to multiple people, which caused issues with product version

control and shared understanding. The knowledge management officer (KMO) identified these issues and began to fix them reactively on a first-in, first-out basis, which created a backlog of KM problems that quickly overwhelmed the KMO. Staff sections did not have appointed knowledge management representatives (KMRs) to assist the KMO with mitigating these issues.

(U) TECHNIQUES AND PROCEDURES: Assign the additional duty of KMR to personnel in the staff sections and ensure that those personnel understand division operation processes and are able to perform KMR duties as described in ATP 6-01.1 and the 101st Airborne Division (Air Assault) KM SOP. The use of KMRs would alleviate issues associated with the use of multiple collaborative tools (CPOF, portal, and PowerPoint documents) and other KM dissemination issues. The KMO can train the division staff more efficiently by utilizing KMRs in a "train the trainer" role, resulting in quicker resolution of KM issues. KMRs also correct issues prior to the publishing of products by providing internal quality control instead of relying on the KMO to reactively correct those issues after publication.

(U) ART 5.3, Conduct Knowledge Management and Information Management

(U) SOURCE: MCTP

(U) Improve OBSERVATION 4

(U) SUBJECT: Operations synchronization (OPSYNC) meeting

(FOUO) OBSERVATION: Synchronization meetings are not consistently collaborative across warfighting functions (WfFs), and they are not synchronized with the brigade's targeting process.

(U) DISCUSSION: The OPSYNC meeting is the key meeting that reviews, synchronizes, and validates enabler distribution to ensure that they are aligned with the commander's priorities. The meeting must take into account the operations and status of unified action partners (special operations forces, interagency partners, host nation security forces, etc.).

(U) As stated in FM 6-0, paragraphs 1-58 and 1-59: "The operations synchronization meeting is the key event in the battle rhythm in support of the current operation. Its primary purpose is to synchronize all warfighting functions and other activities in the short-term planning horizon. It is designed to ensure that all staff members have a common understanding of current operations, including upcoming and projected actions at decision points.

(U) "The [OPSYNC meeting] does not replace the shift-change briefing or operation update and assessment briefing. Chaired by the G-3 (assistant chief of staff, operations) or S-3 (operations staff officer), [the meeting is attended by] representatives of each CP cell and separate staff section. … [The OPSYNC meeting] includes a FRAGORD [fragmentary order] addressing any required changes to maintain synchronization of current operations, and any updated planning guidance for upcoming working groups and boards. All warfighting functions are synchronized, and appropriate FRAGORDs are issued to subordinates based on the commander's intent for current operations."

(U) TECHNIQUES AND PROCEDURES: To best meet the commander's priorities, the OPSYNC meeting should be one of the last meetings conducted each day. A deadline of when inputs from staff, enablers, and subordinates are due should be enforced to allow enough time

to compile the information before the meeting. This will allow the operations team to populate the synchronization matrix prior to the start of the OPSYNC meeting. Following this procedure should provide the following benefits:

- Events that have priority in the asset request process can be properly analyzed.
- The chief of operations and plans officer can be synchronized for all operations.
- The OPSYNC meeting can provide a validation for short-range operations.
- The battle captain can track all operations from day to day.
- A forum is provided for each warfighting function to offer "What do I bring to the fight?" analysis.
- The brigade combat team can accurately process information for the daily commander's update brief.
- Participation from subordinate units/battalions can be increased.

(U) ART 5.1.1.4, Integrate Requirements and Capabilities

(U) SOURCE: JRTC

(U) Improve OBSERVATION 5

(U) SUBJECT: Media engagements

(FOUO) OBSERVATION: Brigade combat team public affairs officers (PAOs) and their commanders struggle to facilitate national, international, and local media access to operational units, including those engaged in combat.

(FOUO) DISCUSSION: During rotations, public affairs professionals often fail to plan, integrate, and synchronize media engagements within the BCT. Many media engagements are not coordinated and do not have established communication goals (evidenced by the lack of in-depth public affairs mission analysis and failure to create and maintain a public affairs staff estimate). Information from media engagements is not integrated back into the operations process to help the commander better understand the information environment.

(U) As stated in FM 3-61, *Public Affairs Operations*, para. 2-66: "Media facilitation is the process of planning, preparing, executing, and assessing a media engagement. It can be accomplished for an individual media engagement or a large-scale media event. A media engagement is a specified instance of media interaction between a Soldier and a member of the media. Media engagements may be planned or unplanned. Media facilitation enables PAOs to identify requirements for a planned media engagement or media event."

(U) TECHNIQUES AND PROCEDURES: The PAO or noncommissioned officer in charge should take advantage of independent planning parallel to the BCT planning process. He should determine communication goals for each major transition and media engagement. These can be synchronized with and coordinated through the inform-and-influence activities (IIA) working

group. By clearly outlining who and what the main effort and supporting efforts are, the public affairs officer or noncommissioned officer in charge will be better able to prioritize assets and produce products to support them. The PAO should develop and update the running estimate, release tracker, media analysis report, and media contact report. This becomes especially important during the preparation and execution of media engagements.

(U) ART 5.7.4, Conduct Media Facilitation

(U) SOURCE: JRTC

(U) Improve OBSERVATION 6

(U) SUBJECT: Standard operating procedures for air defense artillery management and brigade aviation element (ADAM/BAE) personnel

(FOUO) OBSERVATION: ADAM/BAE personnel struggle during initial phases of the exercise to define their respective duties and responsibilities within the section.

(FOUO) DISCUSSION: Uncertainty about the roles of ADAM/BAE personnel impedes shared understanding between CUOPS and FUOPS. The CUOPS section's initial tracking of operations with the tactical airspace integration system, dynamic airspace collaboration tool, and analog products also remains a challenge. All the ADAM/BAE personnel working on the CUOPS floor need to be familiar with all systems, digital and analog, required to conduct operations. In addition to the systems, the ADAM/BAE CUOPS section should be able to provide recommendations to the executive officer, chief of operations, or battle captain on what assets can or should be re-tasked, and what the consequences may be to airspace and mission.

(U) TECHNIQUES AND PROCEDURES: Develop an SOP to support the following areas: wake-up criteria within the ADAM/BAE and main CP as a whole; system maintenance; shift change briefs; air-ground communications architecture; CUOPS layout; and both section and individual roles and responsibilities. Develop a battle rhythm that reflects the actual day-to-day operations of ADAM/BAE, capturing specific routine tasks to be performed by each team member. Develop a working relationship with fires and unmanned aerial systems (UAS) personnel, the battle captain, air liaison officer, and chief of operations to provide timely situational awareness and understanding with guidance concerning airspace management and aviation asset usage. Be sure to include the subordinate battalions to confirm shared understanding of the entire process for airspace clearance and re-tasking of aircraft.

(U) ART 5.2, Conduct Command Post Operations

(U) SOURCE: JRTC

(U) Improve OBSERVATION 7

(U) SUBJECT: Liaison officers (LNOs)

(FOUO) OBSERVATION: LNOs are not fully leveraged in plans or CUOPS or with unified action partners (UAPs).

(FOUO) DISCUSSION: LNOs often lack the experience and knowledge to conduct liaison activities, and they often do not provide information on what is currently happening with their respective units. LNOs are not incorporated into the planning process, either. Commanders

use LNOs to transmit information directly, bypassing headquarters and staff layers. They are extensions of their subordinate units who assist the headquarters staff and commander with situational awareness of supporting units' current and future operations. Additionally, LNOs provide their parent units with relevant information about activities and operations. Some tasks associated with LNOs include:

- Understanding what the sending commander wants the receiving commander to know.
- Circulating RFIs pertinent to their unit.
- Acquiring or generating subordinate timelines based on combing through various sources of information (subordinate products, commander's update brief notes, e-mail).
- Tracking changes to unit mission statements, completion of task organization changes, and casualty/replacement numbers.
- Assisting in leveraging resources and addressing logistical concerns.
- Attending and participating in targeting meetings.

(U) TECHNIQUES AND PROCEDURES: Define what standard information requirements and tasks LNOs need to battle-track and execute. Assign someone to supervise them. Doctrinally, this is the chief of staff; however, the chief of operations or plans officer can be delegated this task. Standardize how the LNOs present information, possibly simplifying complex slides and holding LNOs responsible for briefing the information as they point to companies on the COP. Help them develop their briefing skills. Assist LNOs in developing sufficient understanding to communicate guidance and thoroughly answer questions. Commanders should understand that an LNO should be a top-tier NCO or officer who can actively represent the interests of his commander in the brigade main CP or plans shop.

(U) ART 5.1.2.1, Establish Coordination and Liaison

(U) SOURCE: JRTC, JMRC

(U) Improve OBSERVATION 8

(U) SUBJECT: Liaison officers (LNOs) in multinational operations

(FOUO) OBSERVATION: BCTs are challenged in establishing LNO requirements and support packages during multinational operations.

(FOUO) DISCUSSION: Multinational operations require greater liaison efforts than most operations. The current modification tables of organization and equipment for combat brigades and battalions do not provide enough personnel or equipment for reciprocal liaison operations with subordinate and adjacent units.

(FOUO) In addition to the lack of personnel, the rank and experience level authorized for battalion and brigade LNOs do not facilitate shared understanding during multinational operations. The current authorizations for rank and experience are detrimental to multinational operations, where brigade and battalion staffs expect LNOs to be proficient in MDMP, unit

tactics and techniques, and overall general staff procedures. This is especially apparent in units that do not have solid collaborative planning processes and during time-constrained decision-making process periods.

(FOUO) Current equipping authorizations limit LNO abilities to communicate inside receiving units' tactical operations centers or main command posts. LNO teams are not currently authorized a laptop computer or equipment to remote their VRC-90 (vehicular radio communications) or Force XXI Battle Command Brigade and Below (FBCB2)/Blue Force Tracking (BFT) communications platforms.

(U) TECHNIQUES AND PROCEDURES: Battalions must plan and prepare for reciprocal liaison operations with each adjacent battalion. If possible, LNO teams should be manned from like organizations remaining at home station. If not possible, use experienced platoon leaders with able platoon sergeants capable of effectively serving as platoon leaders. When providing an LNO to a multinational unit, the LNO should be proficient in MDMP, understand decision point tactics, and have solid knowledge of battalion-level TTPs. If a U.S. battalion is attached to a multinational brigade, the battalion should provide an LNO in the rank of captain with company command experience or a major.

(U) ART 5.1.2.1, Establish Coordination and Liaison

(U) SOURCE: JMRC

(U) Improve OBSERVATION 9

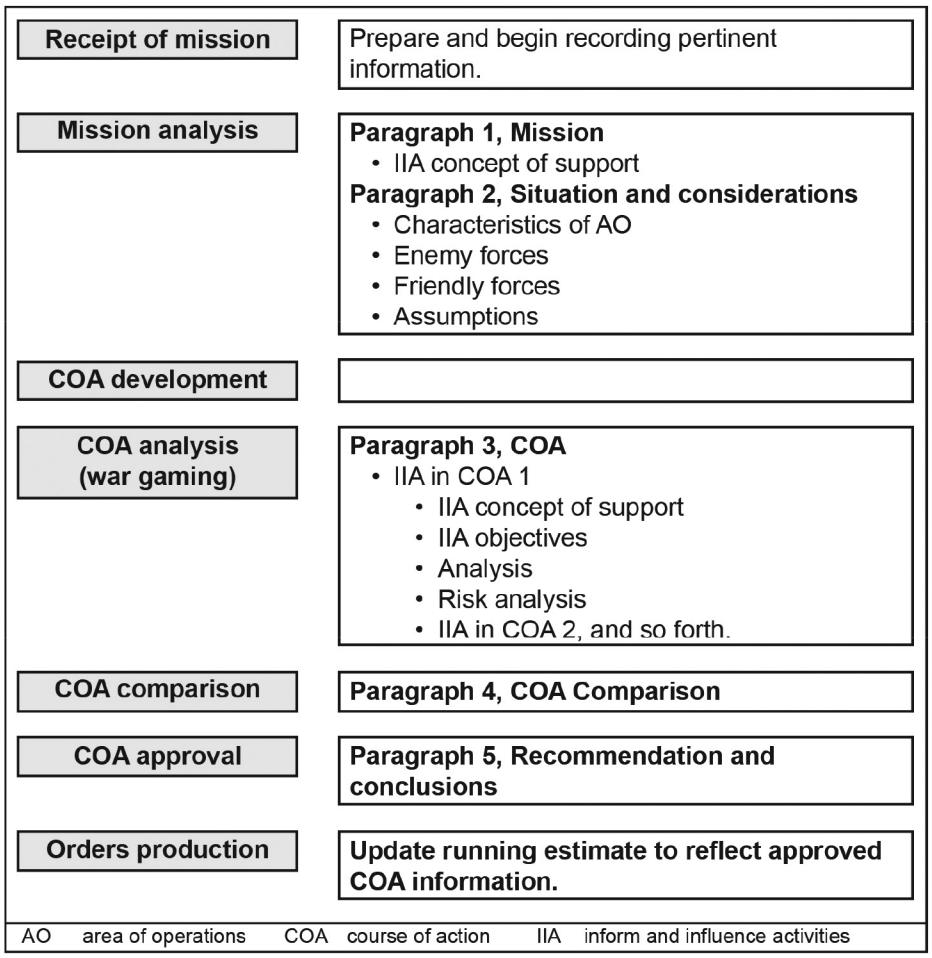
(U) SUBJECT: Information operations (IO)

(FOUO) OBSERVATION: IO officers struggle to fully integrate into the brigade staff and establish and maintain relevancy during planning and execution of operations.

(FOUO) DISCUSSION: Brigade combat team IO officers are not fully integrated into the brigade's planning process and battle rhythm. IO officers do not understand how to integrate information-related capabilities (IRCs) into operations. Much of this stems from IO officers' lack of understanding of the information environment and the BCT's operational approach. In order to successfully synchronize and integrate IRCs and achieve effects, the IO officer must understand the commander's objectives and end state. Without such understanding, IO often becomes an afterthought.

(U) "Commanders ensure overarching themes, and their supporting messages and actions are consistent in their intent and communicated to the lowest level of command. Synchronization of messages and actions promotes and shapes the attitudes and behaviors of the audiences in the area of operations while affecting adversary or enemy information efforts. Synchronization of consistent messages and actions supports the commander's operational goals and avoids contradiction and information fratricide." (FM 3-13, *Inform and Influence Activities*, para. 1-4)

(U) "The G-7 (S-7) IIA officer and section have responsibility to plan for and integrate all potential operational assets supporting IIA efforts. Based on assessments, this allows for message alignment, reinforcement, and consistency to support the overall concept of operations rather than individual events or missions." (FM 3-13, para. 2-1)



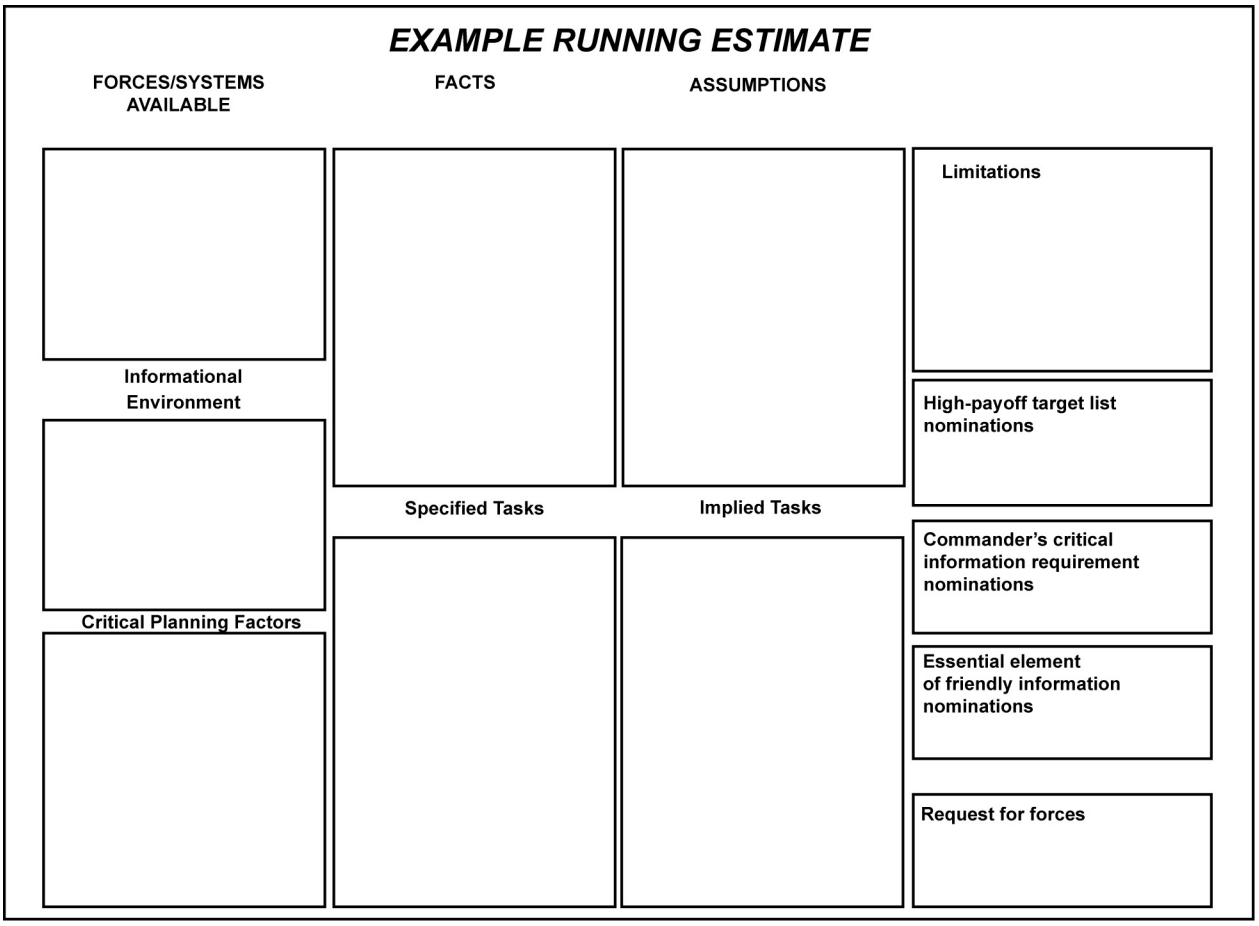
(U) Figure 2-2. Information operations running estimate and MDMP. (Source: FM 3-13)

(FOUO) Brigade S-7s often do not fully understand the commander's operational approach; because of this, S-7s do not understand how to integrate IRCs into the operation to help the commander achieve his objectives. The IO officer's participation in the planning process, to include mission analysis, course of action (COA) development, and war gaming, is often limited or non-existent. The IO officer's absence during critical planning events causes the brigade staff to omit or develop only generic themes, messages, objectives, and assessments that do not adequately inform or aid the commander's understanding or help to achieve effects in the information environment. (See Figure 2-2)

(U) TECHNIQUES AND PROCEDURES: Brigade IO officers need to develop a comprehensive IO running estimate to feed planning efforts and battle rhythm working groups. Brigade IO officers need to develop and conduct IO working groups establishing clear agendas, inputs, and outputs. This allows the IO officer to integrate information-related capabilities into the operational framework and help achieve effects. IO officers should utilize the commander's concept of the operation and his targeting guidance to focus the inputs and outputs of the IO working group. (See Figure 2-3, next page)

(U) ART 5.7, Integrate Inform and Influence Activities

(U) SOURCE: JRTC



(U) Figure 2-3. Example of a graphical information operations running estimate.

(U) Improve OBSERVATION 10 Return to Common Observations

(U) SUBJECT: Running estimates

(FOUO) OBSERVATION: Running estimates are not sufficiently developed or maintained.

(FOUO) DISCUSSION: Brigade combat team staff sections routinely fail to develop and maintain running estimates. Many estimates that are developed lack the essential elements of running estimates and fail to address all aspects of the operation.

(U) BCT staff elements should build and maintain their respective running estimates. The running estimate is a fluid document that helps the staff provide the commander with pertinent data to help him understand, visualize, describe, and direct. Running estimates should be updated throughout the operations process phases of planning, preparation, execution, and assessment.

(U) "A running estimate is the continuous assessment of the current situation used to determine if the current operation is proceeding according to the commander's intent and if planned future operations are supportable. (Army Doctrine Publication [ADP] 5-0, *The Operations Process*) The commander and each staff element maintain a running estimate. In their running estimates,

1. **SITUATION AND CONSIDERATIONS.**
   a. **Area of Interest.** Identify and describe those factors of the area of interest that affect functional area considerations.
   b. **Characteristics of the Area of Operations.**
      (1) Terrain. State how terrain affects a functional area's capabilities.
      (2) Weather. State how weather affects a functional area's capabilities.
      (3) Enemy Forces. Describe enemy disposition, composition, strength, and systems within a functional area. Describe enemy capabilities and possible courses of action (COAs) and their effects on a functional area.
      (4) Friendly Forces. List current functional area resources in terms of equipment, personnel, and systems. Identify additional resources available for the functional area located at higher, adjacent, or other units. List those capabilities from other military and civilian partners that may be available to provide support within the functional area. Compare requirements to current capabilities and suggest solutions for satisfying discrepancies.
      (5) Civilian Considerations. Describe civil considerations that may affect the functional area, including possible support needed by civil authorities from the functional area as well as possible interference from civil aspects.
   c. **Facts/Assumptions.** List all facts and assumptions that affect the functional area.
2. **MISSION.** Show the restated mission resulting from mission analysis.
3. **COURSES OF ACTION.**
   a. List friendly COAs that were war-gamed.
   b. List enemy actions or COAs that were templated that impact the functional area.
   c. List the evaluation criteria identified during COA analysis. All staffs use the same criteria.
4. **ANALYSIS.** Analyze each COA using the evaluation criteria from COA analysis. Review enemy actions that impact the functional area as they relate to COAs. Identify issues, risks, and deficiencies these enemy actions may create with respect to the functional area.
5. **COMPARISON.** Compare COAs. Rank order COAs for each key consideration. Use a decision matrix to aid the comparison process.
6. **RECOMMENDATIONS AND CONCLUSIONS.**
   a. Recommend the most supportable COAs from the perspective of the functional area.
   b. Prioritize and list issues, deficiencies, and risks and make recommendations on how to mitigate them.

(U) Figure 2-4. Format for a generic base running estimate. (Source: FM 6-0)

the commander and each staff element continuously consider the effects of new information and update the following: facts, assumptions, friendly force status, enemy activities and capabilities, civil considerations, conclusions, [and] recommendations." (FM 6-0, para. 8-1; see Figure 2-4)

(U) TECHNIQUES AND PROCEDURES: At home station training prior to deployment on combat training center rotations, staff sections should develop comprehensive running estimates to address all aspects of operations within their respective warfighting function. Staffs should ensure that all estimates apply to all phases of the operations process (planning, preparation, execution, and assessment).

(U) ART 5.1.1, Plan Operations

(U) SOURCE: JRTC

(U) Improve OBSERVATION 11

(U) SUBJECT: Brigade knowledge management (KM)

(FOUO) OBSERVATION: Brigade combat teams do not facilitate situational understanding through knowledge management.

(FOUO) DISCUSSION: BCT staffs tend to focus on the tool aspect of knowledge management and not the other components (aligning people and processes). The BCT needs to focus on the whole organization of people, processes, and tools in order to bridge the gap between the human dimension and the technical dimension and to create shared understanding among the staff members.

(U) "Units facilitate situational understanding through knowledge management when they create, organize, apply, and transfer knowledge to help develop a common operational picture and situational understanding. Knowledge management supports improving organizational learning, innovation, and performance. Knowledge management processes ensure that knowledge products and services are relevant, accurate, timely, and useable to commanders and decision makers.

(U) "Success in operations demands timely and effective decisions based on applying judgment to available information and knowledge. Throughout the conduct of operations, commanders (supported by their staffs, subordinate commanders, and unified action partners) seek to build and maintain situational understanding. Situational understanding is the product of applying analysis and judgment to relevant information to determine the relationships among the operational and mission variables to facilitate decision making." (FM 6-0, para. 3-1)

(U) TECHNIQUES AND PROCEDURES: BCT staffs should establish and execute a functional KM working group, develop an SOP that establishes KM functions and designates roles and responsibilities, and develop and publish Annex Q (Knowledge Management) with guidance from the BCT commander. (See Table 2-1, next page)

(U) ART 5.3.1, Conduct Knowledge Management

(U) SOURCE: JRTC

(U) Improve OBSERVATION 12

(U) SUBJECT: Capability Set 14 system

(FOUO) OBSERVATION: Most rotational units are not employing the CS-14 to its full potential or integrating the system to supplement the analog equivalent.

(FOUO) DISCUSSION: Rotational units are not implementing the new CS-14 system in their operations. Typically, rotational units integrate the system in their navigation plan, but do not use the reporting system, photo capabilities, battle tracking functions, or even the Microsoft Excel, Word, and similar functions. (Discussion continues on Page 28)

(U) Table 2-1. Example Annex Q (Knowledge Management) With BCT Commander Guidance

<table>
<tr><td>Purpose/
Frequency</td><td colspan="2">Purpose: Venue in which knowledge management (KM) initiatives, tasks, concerns, and ideas are shared and disseminated throughout the unit
Frequency: Weekly</td></tr>
<tr><td>Composition</td><td colspan="2">Chair: Either the chief of staff or unit KM officer
Attendees:
• All subordinate KM and information management officers
• Assessment analyst
• Army Battle Command System contractors
• Others by exception</td></tr>
<tr><td>Inputs/
Outputs</td><td>Inputs:
• Identify emerging best practices
• Develop system and social network rapport and trust
• Qualitative interviews (What’s working for you?)
• Mission observations (commonalities identified and reported)
• AAR/debrief attendance and reporting (no “airing dirty laundry”)
• Identifying reporting procedures by unit (This gets units thinking about the value of lessons to others: “What did we learn this week?”)
• Leader support — at every level
• Unit focal point contact: If everyone is responsible, no one is responsible
• Make it easy — 10 minutes or less to transfer new knowledge to site</td><td>Outputs:
• Weekly “push” highlighting what is learned (electronic) and targeted (demonstrated value)
• Leader postings — what is working for us (building a community of practice)
• Lateral sharing of knowledge — leaders sharing with leaders
• Clean up public sites on SIPRNET
• Submit inputs/outputs
• Submit any recommendations to the working group summary format
• Recommendations on collaboration initiatives
• KM training inputs to unit training schedule</td></tr>
<tr><td>Agenda</td><td colspan="2">• Inputs and outputs
• Team pages
• Working group summary format: key discussion, briefs, actions, and contacts
• Collaborative forums
• Collaboration portal support plan</td></tr>
</table>

(FOUO) Regarding the navigation capability, units have been solely using CS-14 to develop their common operating picture (COP) rather than relying on analog graphics. Commanders are no longer briefing their scheme of maneuver on a map or set of analog graphics, but are relying on satellite imagery of their AO to brief their concept. Given that the system is operational, this technique is satisfactory, but there is no redundancy in most commanders' plan for navigation or their COP.

(FOUO) Successful units are able not only to communicate but to share graphics and positions where each squad maneuvers for an operation, providing a much more thorough understanding of the mission. Additionally, the units are able to update with real-time intelligence potential or actual enemy locations to provide situational awareness to all dismounted Soldiers conducting operations in or around an objective area.

(FOUO) TECHNIQUES AND PROCEDURES: Successful units ensure they create redundancy in their systems for navigation and the COP. When small units navigate now, they rely on their CS-14 GPS to guide them in a straight line from the start point to the end point without taking the terrain into consideration. During rotations, companies navigated through low-ground swamps identified on an analog map rather than bypassing the swamp. Similarly, units would attack objectives from whichever side the GPS directed them rather than approaching the objective from the direction that made tactical sense.

(FOUO) The CS-14 system has helped to fill many gaps in the previous digital systems of the tactical fight. Its effectiveness depends on trained operators and redundant analog systems.

(U) ART 5.1.1, Prepare for Tactical Operations

(U) SOURCE: JRTC

(U) Improve OBSERVATION 13

(U) SUBJECT: Company and platoon troop leading procedures

(FOUO) OBSERVATION: Companies and platoons struggle with applying TLPs during high-operating-tempo periods, specifically with incorporating key planning concepts such as parallel planning, the one-third/two-thirds rule, and reverse/backward planning.

(FOUO) DISCUSSION: Rotational units often do not continuously share information on future operations with subordinate units, and likewise, subordinate commanders and leaders do not integrate themselves into their higher headquarters' planning process to provide bottom-up feedback, situational awareness, and clarification of battalion planning horizons. Instead of parallel planning, what has been observed is sequential planning, whereby commanders and platoon leaders wait until their higher headquarters finish planning and issue an OPORD before they start developing their unit's mission.

(FOUO) Commanders and platoon leaders are not developing planning timelines that allow them to follow the one-third/two-thirds rule. Leaders do not properly allocate their available time. They frequently use too much time themselves and do not allow enough time for subordinates to plan and prepare for a mission. This does not allow for efficient or disciplined planning techniques. Company commanders do not enforce the one-third/two-thirds rule for platoons, to include no-later-than times for platoon orders, which often delays platoon orders and leaves no time for TLPs.

(U) TECHNIQUES AND PROCEDURES: During pre-rotational training, companies must train platoon leaders and squad leaders on TLPs. This should include developing an SOP describing how the company conducts mission planning, the roles and responsibilities of leaders during TLPs, and the minimum requirements for orders (warning order, operation order, fragmentary order) and mission products (common graphics, graphic reference grids, execution checklists).

(U) Company commanders should attend key battalion MDMP events, such as the mission analysis brief and course of action (COA) brief, along with holding periodic face-to-face interaction with the planning officer to stay abreast of current planning factors and changes. Once the platoon leader issues the warning order, he ties back into the company planning process to assist the company commander with mission analysis and COA development. This allows for a more collaborative effort where platoon leaders can have a briefing role in the company OPORD. As a result, platoon leaders not only have more ownership of the plan, but coordination among platoons is improved and platoon leaders have enough information to quickly give their platoon order after the company order.

(U) During development of Warning Order 1, commanders should include a planning timeline that enforces the one-third/two-thirds rule along with a no-later-than platoon order to ensure squad TLPs are supported. Once deliberate TLPs are understood at subordinate levels and SOPs are defined on how the company executes TLPs, the company/platoons can develop a modified process for shortened planning times, focusing on minimal products needed for subordinates to execute assigned tasks.

(U) ART 5.1.1, Prepare for Tactical Operations

(U) SOURCE: JRTC

(U) Improve OBSERVATION 14

(U) SUBJECT: Reporting procedures and mission command

(FOUO) OBSERVATION: Commanders often lack the information to make timely and effective adjustment decisions due to changes in the unit's operational environment (OE) during mission execution.

(FOUO) DISCUSSION: Changes to the OE during the execution of a mission force a commander to make unplanned changes to his scheme of maneuver. Often at JRTC, this results in the desynchronization of the unit's operation or the loss of tempo at a critical point. The operation normally becomes desynchronized when the commander makes an adjustment without understanding how friendly and enemy forces are arrayed and issues guidance that fails to integrate and nest his subordinate units' efforts. Tempo is lost when the commander does not get routine reports and finds himself having to slow his operations to pull information required to make an effective adjustment decision. That pause provides the enemy an opportunity to exploit.

(FOUO) Units often fail to have established reporting SOPs that catalog reports as routine, critical, or exceptional, and outline when those reports are transmitted and who sends and receives those reports. Of note, friendly forces information requirements (FFIRs) are the most overlooked of all reporting requirements.

(FOUO) TECHNIQUES AND PROCEDURES: To improve, units must establish a system of routine reporting formats prior to execution of their rotation at JRTC, such as troops in contact, spot reports, damage assessments, and situation reports (SITREPs). In addition, units must link specific duty positions to those reports and identify times at which those are transmitted. For example, for routine reporting: if a squad becomes engaged by an unknown number of enemy, the squad leader transmits to the platoon leader via the platoon net that he is in direct-fire contact. The platoon radio operator transmits to the company radio operator via the company net that one of the platoon's squads is in direct-fire contact at the grid where the squad is located. As the situation develops, the squad leader then transmits a spot report as he gains understanding of the situation. The platoon radio operator transmits the spot report to the company radio operator. Platoon sergeants call up casualty reports via the company net but maintain brevity; i.e., "One casualty." Once at the limit of advance, the platoon leader provides a SITREP to the commander detailing battle damage and his current situation. Platoon sergeants call via the company administrative and logistics net to send up liquid, ammunition, casualties, and equipment loss (LACE) reports and 9-line requests following consolidation/reorganization.

(U) ART 5.1.4, Assess Tactical Situations and Operations

(U) SOURCE: JRTC

(U) Improve OBSERVATION 15

(U) SUBJECT: Mortar leaders and planning

(FOUO) OBSERVATION: A common mortar platoon observation at JRTC is that the platoon leader and platoon sergeant are not included in the battalion planning process.

(U) DISCUSSION: The mortar platoon leader is primarily a combat leader. He also is the principal adviser to the battalion commander and battalion fire support officer (FSO) on the tactical employment of mortars. The mortar platoon leader:

- Recommends task organization, employment techniques, and positioning of the mortars to support the scheme of maneuver.
- Assists in developing the fire support plan in conjunction with the company or battalion FSO and determines the best type and amount of mortar ammunition to fire, based on the METT-TC factors of mission, enemy, terrain and weather, troops and support available, time available, and civil considerations.
- In accordance with the battalion OPORD and plan for fire support, develops his supporting platoon plan and reviews it with the FSO and operations officer. The amount of detail and time spent developing the supporting plan may vary, based on the situation.
- Assists the operations officer in determining the required supply rate. If a controlled supply rate has been set, the mortar platoon leader may not exceed it without authorization. The platoon leader may need to recommend changes to the mortar platoon's mission based on the controlled supply rate.
- Informs the commander, S-3, and FSO of all significant range or ammunition limitations.

Including the mortar platoon leader in the overall planning process ensures that the battalion's indirect organic firepower can produce the intended effects on the battlefield. Typically units fail to include the mortar platoon leadership in any planning process, thus limiting the mortar platoon's effectiveness.

(U) TECHNIQUES AND PROCEDURES: Include mortar platoon leaders as part of the battalion planning process. "A battalion (or squadron) commander is responsible for the tactical employment of his mortar platoon. He cannot delegate this responsibility. The final responsibility for the tactical employment of a mortar unit, just as with all other elements, rests with the commander. For his mortar unit to be effective, a commander must provide a clear idea of what he wants his mortar unit's fires to do and how he wants them to support his maneuver. He must know the capabilities, limitations, and characteristics of mortars." (Army Tactics, Techniques, and Procedures 3-21.90, *Tactical Employment of Mortars*, para. 2-4)

(U) ART 5.1.1.4, Integrate Requirements and Capabilities

(U) SOURCE: JRTC

(U) Improve OBSERVATION 16

(U) SUBJECT: Company commander roles and responsibilities in planning

(FOUO) OBSERVATION: Company commanders sometimes do not properly delegate roles and responsibilities when planning and writing an operation order.

(FOUO) DISCUSSION: Many times when the company commander receives the OPORD from battalion, he does all the work himself when he plans the company OPORD. At the maneuver captains career course (MCCC), captains are expected to plan, develop, and write a company-level OPORD within a six-hour time limit. A captain works alone with no others to help him develop his plan and deliver it to the small-group instructor at MCCC. That same captain then graduates from MCCC and moves on to take command of a company. Most captains carry this habit of working alone to their companies.

(FOUO) More often than not, company commanders do not delegate roles and responsibilities to their company headquarters. As a result, these companies do not follow the one-third/two-thirds planning timeline. These companies continually miss key execution times and do not allow enough time for platoons to conduct proper rehearsals and precombat checks and inspections (PCCs/PCIs).

(U) TECHNIQUES AND PROCEDURES: Companies must develop a planning standard operating procedure (PSOP) that clearly outlines the roles and responsibilities of all elements within the company. This also helps develop planning priorities. Delegate the fires plan to the FSO and the enemy situation to the 35F. The executive officer and the first sergeant develop the sustainment and medical plan for each operation. Such delegation allows the company commander time to develop the company scheme of maneuver, while freeing up time for the platoons to develop their plans.

(U) ART 5.1.2, Prepare for Tactical Operations

(U) SOURCE: JRTC

(U) Improve OBSERVATION 17

(U) SUBJECT: Company intelligence support team (CoIST) operations

(FOUO) OBSERVATION: Companies often make poor use of CoIST personnel in the command post.

(FOUO) DISCUSSION: CoISTs are battlefield multipliers that are poorly used in decisive action rotations. CoIST personnel are often used as runners or security and are not integrated well into the company CP or the operations process. Often, CoIST personnel come from battalion to provide — in theory — easier tracking of products and a shared reporting system. However, because the CoIST has not worked with the company extensively within the CP, the company does not understand the roles and responsibilities of the CoIST personnel. They are not used to further refine products received from the S-2, creating a void at the company level for the intelligence warfighting function. CoISTs are essential for managing information describing the effects of weather, enemy, terrain, and civilian considerations on friendly operations. CoISTs, when used properly, can assist the commander by collecting and analyzing intelligence summaries, site exploitations, patrol briefs, link diagrams, be-on-the-lookout lists, and information collection. CoIST personnel must be trained and allowed to fulfill their role in the CP.

(U) TECHNIQUES AND PROCEDURES: Units whose CP SOP has a clearly defined expectation for CoISTs are able to more effectively utilize assets and produce much higher quality company-level refinement of the S-2's plan. Further performance measures and steps for conducting CoIST operations can be found under Task 071-630-0010, Conduct Company Intelligence Support Team Operations, on the Army Training Network.

(U) ART: 5.2, Conduct Command Post Operations

(U) SOURCE: JRTC

(U) Improve OBSERVATION 18

(U) SUBJECT: Division of roles and responsibilities between the main and tactical command posts

(FOUO) OBSERVATION: Units face challenges in clearly dividing roles and responsibilities when the battalion tactical command post (TAC) is deployed forward.

(FOUO) DISCUSSION: Often, the battalion main CP is left with unclear guidance and is unsure what it is required to report or track. As a result, main CPs often become bogged down in redundant reporting and trying to fight the battle the TAC is currently controlling. The main CP can and should set the conditions for the next phase, continue the planning process, and facilitate the TAC's control of the current fight.

(U) TECHNIQUES AND PROCEDURES: The duties and responsibilities of the main CP are outlined in FM 6-0.

(U) ART 5.2, Conduct Command Post Operations

(U) SOURCE: JRTC

(U) Improve OBSERVATION 19 Return to Common Observations

(U) SUBJECT: Execution of the complete military decisionmaking process

(FOUO) OBSERVATION: Units are challenged in executing all the steps of MDMP.

(FOUO) DISCUSSION: The first cycle of MDMP executed during the Leaders Training Program (LTP) or just prior to entering the box is generally done well. Units conduct all steps of MDMP in order and produce the proper products and outputs from each step. However, as units enter the box and time management becomes a factor, units are frequently not conducting MDMP or are skipping steps to save time. Most commonly, units skip mission analysis and go straight to course of action (COA) development without a true planning effort. They then have an assistant S-3 produce an order with minimal staff synchronization. As a result, units find themselves facing friction points during the operations where assets are not synchronized and systems begin to collapse. This cycle repeats itself as units try to get ahead and reduce time in their planning efforts to allow more time for execution. Units must ensure that they execute all steps of MDMP, even if the steps are hasty, and produce the required outputs. These outputs include warning orders that will help companies conduct parallel planning and start movement and preparation for execution.

(U) TECHNIQUES AND PROCEDURES: MDMP is outlined in Field Manual 6-0, *Commander and Staff Organization and Operations*.

(U) ART 5.1.1.2, Conduct the Military Decisionmaking Process

(U) SOURCE: JRTC

(U) Improve OBSERVATION 20

(U) SUBJECT: Operate a company command post

(FOUO) OBSERVATION: Companies often do not establish effective CPs and struggle with battle tracking.

(FOUO) DISCUSSION: Based on the rotations observed, companies rarely establish effective CPs. They often use the commander's vehicle (if present) as the CP because it has FM and occasionally Blue Force Tracking/joint capabilities release (BFT/JCR). But beyond this platform they rarely established a CP. A common operational picture is not readily available to the platoon leaders or sergeants. Companies have difficulty tracking friendly elements, enemy locations, assets available, etc. Company executive officers do not have a clear understanding of the commander's expectations in terms of the CP, and commit most of their efforts to logistics.

(U) TECHNIQUES AND PROCEDURES: Company leaders should revisit FM 3-21.10, *The Infantry Rifle Company*, and FM 3-21.20, *The Infantry Battalion*. Commanders who establish CPs and clearly articulate duties and responsibilities within the CP are much more successful during their rotation. Emphasis should be placed on understanding the roles of the leadership. The executive officer must pay attention to his role as the secondary commander; he must run the CP and prepare to take over the commander's responsibility, if necessary. The first sergeant should be concerned with the Soldiers' requirements and make sure logistics reports are prepared and transmitted to higher. The duties and responsibilities of the CP are outlined in FM 6-0.

(U) ART 5.2, Conduct Command Post Operations

(U) SOURCE: JRTC

(U) Improve OBSERVATION 21

(U) SUBJECT: Common operational picture at the squadron level

(FOUO) OBSERVATION: Several units had a poor COP that lacked the detail needed to understand the unit's and adjacent units' current operations as well as updated enemy situation templates. Rarely would there be a duplicated COP, one analog and one digital.

(FOUO) DISCUSSION: Army Doctrine Reference Publication 6-0, *Mission Command*, para. 2-84, defines a COP as "a single display of relevant information within a commander's area of interest tailored to the user's requirements and based on common data and information shared by more than one command."

(U) TECHNIQUES AND PROCEDURES: There are various ways to display the analog and digital COP. However, both need to be routinely refined in case the digital COP cannot be used (jumping CP locations, power interruptions, etc.). Successful units have utilized both and kept them updated throughout their operations. A complete COP gives the commander a quick and general understanding of what is going on without having to ask for general information. This will allow him to make quick decisions to support the higher intent.

(U) ART 5.2, Conduct Command Post Operations

(U) SOURCE: JRTC

(U) Improve OBSERVATION 22 Return to Common Observations

(U) SUBJECT: Brigade engineer battalion (BEB) and brigade special troops battalion (BSTB) enablers

(FOUO) OBSERVATION: BEB and BSTB commanders do not effectively advise BCT commanders and brigade staffs on enablers.

(FOUO) DISCUSSION: BEB commanders are both executors of missions and senior advisers to the brigade commander and staff. In addition to supervising activities of subordinates during operations, BSTB commanders should advise the commander on how to employ assets/enablers in order to best support the commander's intent. BSTB commanders often forget the importance of the adviser role, especially when the unit is executing missions.

(U) TECHNIQUES AND PROCEDURES: BSTB commanders have significant capability to shape the mission set and influence the brigade staff during TLPs. As a senior adviser, the BSTB commander has the opportunity to advise on the most effective way for employing the unit in support of the BCT commander's intent during any planning process.

(U) ART 5.1.2, Prepare for Tactical Operations

(U) SOURCE: JRTC

(U) Improve OBSERVATION 23

(U) SUBJECT: Army command and support relationships

(FOUO) OBSERVATION: Platoons and teams within the organic signal company and the expeditionary signal company suffered from poor integration and command/support relationships.

(FOUO) DISCUSSION: Brigades and battalions often do not integrate units when they receive the task organization for a JRTC mission. As a result, organic and non-organic signal teams do not understand the mission of the elements they are supporting. This impedes sustainment as well as the integration of the signal platoons and teams into the defense. The supported unit often does not understand the capability and requirements for the signal teams.

(U) TECHNIQUES AND PROCEDURES: Develop an integration SOP outlining duties and responsibilities of the supported and the supporting elements. The signal company and expeditionary signal company should develop a clearly defined enabler brief to provide the supported unit their capabilities, limitations, and required sustainment.

(U) ART 5.2, Conduct Command Post Operations

(U) SOURCE: JRTC

(U) Improve OBSERVATION 24

(U) SUBJECT: S-6 and signal company commander roles and responsibilities

(FOUO) OBSERVATION: Units sometimes do not clearly define roles and responsibilities of the signal company commander and the brigade S-6. This usually results in tension, conflict, and, in some cases, failure to conduct parallel or collaborative planning.

(FOUO) DISCUSSION: Failure to establish roles and responsibilities often causes friction between the signal company and the brigade S-6 section. In some cases, signal company commanders are absorbed into the brigade S-6 section as the assistant S-6. The commander and the company struggle because commander tasks do not receive the attention required.

(U) TECHNIQUES AND PROCEDURES: Ensure that signal company commanders have the opportunity to serve as commanders. Use the network operations to plan the networks, and use the brigade S-6 to communicate with the brigade S-3 to task subordinate units. The brigade S-6 does not have tasking authority over the signal company, but it helps when he informs the signal company commander of missions or taskings that will be published in future orders. This ensures the synchronization of efforts, frees up time for the commander to effectively command the company, and increases the effectiveness of the one-thirds/two-thirds rule.

(U) ART 5.2, Conduct Command Post Operations

(U) SOURCE: JRTC

(U) Improve OBSERVATION 25

(U) SUBJECT: Primary, alternate, contingency, and emergency (PACE) plan

(FOUO) OBSERVATION: Military intelligence (MI) companies often lack an established, refined, and rehearsed PACE plan for administrative and intelligence reporting.

(FOUO) DISCUSSION: Rotational units often arrive with a PACE plan on paper, but have never executed it during operations. As a result, MI companies lose situational awareness of enabler teams, the brigade S-2 does not receive collected intelligence, and intelligence is not incorporated into mission analysis. An MI company cannot execute mission command without a working PACE plan.

(U) TECHNIQUES AND PROCEDURES: Develop a PACE plan based on unit capabilities and organization; then rehearse it in an austere environment. Ensure that team leaders understand the established reporting requirements and battle rhythm, command and S-2 expectations, and how to operate multiple communication systems. Once rehearsed, incorporate the PACE plan into the company CP SOP and review during training exercises.

(U) ART 5.2, Conduct Command Post Operations

(U) SOURCE: JRTC

(U) Improve OBSERVATION 26

(U) SUBJECT: Vertical integration between the brigade aviation element (BAE) and the tactical unmanned aerial system (TUAS) platoon

(FOUO) OBSERVATION: The BAE and the TUAS platoon do not coordinate effectively.

(FOUO) DISCUSSION: The BAE is responsible for the integration and synchronization of aviation into the BCT scheme of maneuver. This synchronization includes the Shadow TUAS. Rotational training units come to JRTC with no prior working relationship between the BAE and TUAS platoon. This gap typically renders Shadow non-mission-capable until approximately D+4. In less severe cases, the lack of coordination between the BAE and TUAS platoon will delay Shadow launches by an average of four hours, resulting in an average overall loss of coverage of approximately 60 hours throughout the course of a rotation. In severe cases, division air (JRTC) removes airspace coordination authority from the brigade due to sustained inadequacies in an attempt to allow the unit to receive some training value from its time at JRTC.

(U) TECHNIQUES AND PROCEDURES: Incorporate the BAE into home station Shadow training. TUAS platoons often coordinate airspace directly with range control at home station, thereby creating a systemic gap in BAE's relationship with the Shadow platoon. By having TUAS platoons request airspace through the BAE and forcing the BAE to clear airspace through range control, the brigade is better prepared to synchronize airspace during CTC rotations and combat operations.

(U) ART 5.1.2.1, Establish Coordination and Liaison

(U) SOURCE: JRTC

(U) Improve OBSERVATION 27

(U) SUBJECT: Fire support planning

(FOUO) OBSERVATION: Inconsistent communications with subordinate units and poor deliberate targeting hinder BCTs' ability to develop a codified fire support plan for operations.

(U) DISCUSSION: FM 3-09, *Field Artillery Operations and Fire Support*, para. 3-5, states: "Fire support planning is the continuing process of analyzing, allocating, and scheduling fires to describe how fires are used to facilitate the actions of the maneuver force. Fire support planning is focused on using the timely and effective delivery of fires to enhance the actions of the maneuver force. It involves the assignment of mission and positioning of field artillery units and identifies the types of targets to attack, identifies the collection assets that acquire and track targets, specifies the fire support assets to attack each identified target, and establishes the criteria for target defeat. The objective of fire support planning is to optimize the application of combat power. It is performed as part of the operations process. Fire support planning includes developing fire plans (target lists and overlays) and determining forward observer control options to ensure fire support is integrated into the commander's scheme of maneuver and can be executed in a timely manner."

(FOUO) Units in a CTC rotation often have issues with developing and disseminating a fire support plan to subordinate units in time for subordinate units to recommend refinements. This happens at both the BCT and battalion/squadron levels as competing requirements rapidly reduce the one-third/two-thirds planning rule.

(U) TECHNIQUES AND PROCEDURES: Observation planning at brigade begins during COA development and addresses those portions of the "decide" step of targeting that deal with which unit/team will observe the target and initiate fires and assess battle damage (effects). This information must be clearly laid out and made part of WARNORDs 1 and 2. Additional details of these decisions are worked out in the war game. General positioning considerations to support the initial observation plan should be considered in COA development and published in WARNORD 3. This maximizes the time that subordinate elements have to execute parallel planning.

(U) ART 5.1.1, Plan Operations

(U) SOURCE: JRTC

(U) Improve OBSERVATION 28

(FOUO) SUBJECT: Transfer of mission command from main command post to the early entry command post

(FOUO) OBSERVATION: Transfer of mission command often is not planned or executed according to well-defined triggers.

(FOUO) DISCUSSION: The S-3 and executive officer (XO) often do not place themselves on the battlefield appropriately to facilitate a positive transfer of mission command. Another question that continues to trouble units is "Where should the task force commander be located?"

(FOUO) TECHNIQUES AND PROCEDURES: The following are recommended:

- Transfer of mission command must be deliberately planned and executed based on well-defined triggers. Examples include communications established with higher/lower echelons, running estimate trackers in place and updated, operational graphics updated and displayed, and aircrews/aircraft (medical evacuation) in a location and postured to assume a mission.
- Establish how the unit will execute transfer of mission command and what information must be transferred in a unit SOP.
- Field grade officers should represent the commander at both the main command post (usually the XO) and early entry command post (usually the S-3).
- The task force commander must be in a location where he can effectively track the organization's movement and issue unwritten orders. Commanders should consider placing themselves either airborne in a command and control aircraft or move by air to the early entry command post immediately after transfer of mission command.

(U) ART 5.2.2.4, Transfer Command Post Functions During Displacement

(U) SOURCE: NTC

(U) Improve OBSERVATION 29 Return to Common Observations

(U) SUBJECT: Conducting the military decisionmaking process as a staff during decisive action operations

(FOUO) OBSERVATION: In a phased operation during force on force, units struggle to manage time and execute deliberate MDMP.

(FOUO) DISCUSSION: Some units come prepared to use the process, while others neglect it altogether, only executing troop leading procedures at the battalion level. Units struggle largely due to their lack of proficiency in conducting MDMP, and many struggle due to limited leadership involvement, specifically from the battalion executive officer.

(FOUO) TECHNIQUES AND PROCEDURES: The Army MDMP must be trained at home station so that it is understood by all battalion staff officers. Units should execute multiple staff exercises utilizing organic equipment, while exercising both the current operations (CUOPS) and future operations (FUOPS) sections at the same time. The battalion XO must establish an MDMP timeline early and enforce it, ensuring that all staff sections participate and provide input.

(U) ART 5.1.1.2, Conduct the Military Decisionmaking Process

(U) SOURCE: NTC

(U) Improve OBSERVATION 30 Return to Common Observations

(U) SUBJECT: Effectiveness of battalion-level fire support rehearsals

(FOUO) OBSERVATION: Fire support rehearsals are effective if properly conducted prior to the combined arms rehearsal (CAR).

(FOUO) DISCUSSION: Fire support rehearsals fall into three categories:

- They are not conducted due to lack of emphasis by the battalion commander or operations officer;
- They are not a real rehearsal but merely a back brief or confirmation brief that lacks a script and is conducted after the CAR; or
- They are effective rehearsals that have either the battalion commander or S-3 present to ensure that fires will be integrated with maneuver.

An effective rehearsal has an agenda or script to ensure that all necessary information is shared; that required personnel are in attendance and ready to brief; and that company fire support officers are prepared to brief detailed observation plans that account for the placement of their fire support vehicle and the placement of each of their forward observers within their company scheme of maneuver. Effective fire support rehearsals include S-2, S-3, and tactical command post representatives. Their presence ensures that all airspace users at the battalion level are synchronized within the battalion AO and can then provide relevant feedback to the brigade to shape the brigade's airspace management plan, ultimately resulting in shorter response times for indirect fires. Effective fire support rehearsals result in effective fire support teams that understand their triggers and can make the best recommendations to their counterparts during the CAR.

(FOUO) TECHNIQUES AND PROCEDURES: Battalions should conduct an effective fire support rehearsal prior to their NTC rotation. The agenda or script for the fire support rehearsal should be disseminated from the battalion S-3 to the forward observers at platoon level. Battalions should conduct the fire support rehearsal immediately before their combined arms rehearsal for a more effective CAR. You cannot expect to have fires synchronized with maneuver on the battlefield without an effective rehearsal.

(U) ART 5.1.2.2, Perform Rehearsals

(U) SOURCE: NTC

(U) Improve OBSERVATION 31

(U) SUBJECT: Utilization of the combat trains command post

OBSERVATION: Unit SOPs often do not clearly define the roles and responsibilities of the combat trains command post (CTCP). As a result, the CTCP often is not used to successfully manage forward support in cavalry organizations.

(FOUO) DISCUSSION: Rotational units typically arrive with little to no foundation on how they want to utilize each of their command nodes, specifically in cavalry organizations. Units that arrive without a clear understanding of how they want their CTCP to support the squadron fight often do not realize the value of this command node. The CTCP, defined as the coordination center for combat service support for the squadron, often is left out of unit SOPs. The CTCP frequently has insufficient communications platforms and often must be collocated with the unit maintenance collection point or other command node in order to make use of the assigned very small aperture terminal (VSAT) or Force XXI Battle Command Brigade-and-Below (FBCB2)/ joint capabilities release (JCR) systems.

(FOUO) TECHNIQUES AND PROCEDURES: Most successful units have an established and rehearsed mission command plan. The overall mission and commander's intent are communicated effectively to successful CTCPs, and an SOP for manning and equipping the CTCP is established in the unit's tactical SOP prior to rotation. In addition, it is essential to ensure that the proper equipment is available to implement PACE plans and that the unit has enough people trained to operate each system (FM, JCR, tactical communications satellite, ground routing protocol, Transverse, etc.). The CTCP must be able to anticipate requirements and prepare to push support forward. Successfully doing this requires the right personnel, an aggressive headquarters and headquarters troop commander/S-4, and emphasis in the unit SOP.

(U) ART 5.2.1, Conduct Command Post Operations to Support Tactical Operations

(U) SOURCE: NTC

(U) Improve OBSERVATION 32 Return to Common Observations

(U) SUBJECT: The role of the provost marshal, at echelon, with regard to detention operations

(FOUO) OBSERVATION: By committing a significant portion of the military police company to detention operations, the brigade significantly hinders its military police combat power.

(FOUO) DISCUSSION: During decisive operations, detention operations normally fall under the supervision of the military police (MP) company assigned to the BCT. FM 3-63, *Detainee Operations*, para. 2-5, states: "While conducting stability tasks, military police unit missions may be prioritized and the capability of military police assets to take control of detainees at DCPs [detainee collection points] may be limited." In these cases, non-MP units may operate collection points under the supervision of the echelon provost marshal.

(FOUO) TECHNIQUES AND PROCEDURES: While planning for detention operations within the BCT, utilize the provost marshal in a supervisory role to oversee detention operations without committing a vast amount of MP combat power. A robust mix of military police and non-MP personnel and subject matter experts will allow for the same results at a detainee collection point, while freeing up MP Soldiers to execute wide area security operations in support of decisive operations.

(U) ART 1.10, Conduct Maneuver Support Operations

(U) SOURCE: NTC

(U) Improve OBSERVATION 33

(U) SUBJECT: Evidence collection and processing

(FOUO) OBSERVATION: Explosive ordnance disposal (EOD) rotational units are providing forensic evidence from training events in the decisive action training environment (DATE), but have limited capabilities in establishing non-contaminated processing and packaging.

(FOUO) DISCUSSION: Units executing a DATE rotation operate in an austere environment and conduct their command post operations in the same location as their sleep and work areas. This does not provide adequate space for a secure, contamination-free area to catalog evidence received from teams conducting EOD procedures or to render safe any explosive devices in the DATE.

(FOUO) TECHNIQUES AND PROCEDURES: Units can successfully conduct contamination-free processing of evidence if they segregate an area as a clean work surface. They must assign a senior NCO in the operations section to ensure that the area is free of any cross-contamination and establish adequate measuring and photographing procedures for the evidence to be processed and sealed. This will allow for better understanding of the device and its composition, and identification of key pieces of forensic evidence.

(U) ART 6.3, Conduct Information Protection

(U) SOURCE: NTC

(U) Improve OBSERVATION 34

(U) SUBJECT: Communications for fire missions processing

(FOUO) OBSERVATION: Communications lack a primary, alternate, contingency, and emergency (PACE) plan for fire mission processing.

(FOUO) DISCUSSION: During NTC rotations, units commonly over-rely on Advanced System Improvement Program (ASIP) frequency modulation (FM) voice communications. Although FM voice is simple and reliable over short distances, the communications system starts to become unreliable as data is added or the range is extended. When this occurs, units are quick to blame equipment or defer to field support representative help. Most of the issues are caused by a failure to maintain systems at the user level or a failure to plan appropriately. Due to a lack of home station training, few units have a communication PACE plan other than FM digital, FM voice, and Blue Force Tracking/joint capabilities release. There are several alternate systems available, such as high frequency or tactical satellite, that may be deployed.

(FOUO) TECHNIQUES AND PROCEDURES: Basic training both in the use of alternate systems and basic operator-level maintenance would go a long way in providing for a more robust fires communications PACE plan.

(U) ART 5.3.3, Establish the Information Network and Information Systems

(U) SOURCE: NTC

(U) Improve OBSERVATION 35 Return to Common Observations

(U) SUBJECT: Time management

(U) OBSERVATION: Units often conduct poor planning and rehearsals because of a lack of time management.

(FOUO) DISCUSSION: Company commanders often fail to properly manage their available time for mission planning. By not accounting for enemy actions, light and weather effects, operational/logistical requirements, planning steps, or requirements given by higher headquarters, companies struggle to successfully plan or execute rehearsals that contribute to a better shared understanding of the mission.

(U) TECHNIQUES AND PROCEDURES: Commanders should utilize backward planning, prioritization of requirements, and the one-third/two-thirds rule while planning. With successful backward planning, the commander can allocate the appropriate amount of time for planning.

During planning, he must prioritize what must be accomplished and scale the level of detail in his planning based on time available. A robust timeline should be created and posted or distributed for the platoon leaders to balance their planning considerations. The timeline should incorporate considerations of higher headquarters key times, operational requirements, planning and troop leading procedures times, enemy considerations, and light/weather data. This method (often called the HOPE timeline) quickly accounts for key events and contributes to successful planning by making overlapping events easy to see. For example, units often conduct rehearsals based on times of convenience due to a short mission timeline and other requirements. Often the most convenient times are at night. A rehearsal executed under conditions of limited or no visibility is far less likely to facilitate, or could even detract from, the unit's understanding of the operation. In this case, a poorly executed rehearsal is worse than not conducting a rehearsal at all. It may be more difficult to execute the rehearsal an hour earlier than originally planned, but by executing it during daylight conditions, the unit will gain increased understanding of the operation. A timeline that accounts for higher requirements (battalion combined arms rehearsal), operational requirements (logistics package (LOGPAC) or refueling), planning considerations (platoon rehearsals), enemy (recon established), and light/weather data (sunset and end of evening nautical twilight times) will help leaders to plan more effectively.

(U) ART 5.1.2.5, Conduct Preoperations Checks and Inspections (PCC/PCI)

(U) SOURCE: NTC

(U) Improve OBSERVATION 36

(U) SUBJECT: Forward support company (FSC) planning

(U) OBSERVATION: Units often lack SOPs as well as systems and processes to run company operations.

(U) DISCUSSION: The task force needs to understand the capabilities of the forward support company, and the FSC needs to understand the priorities of support, including the priority of maintenance. A lack of systems and processes at the company level and a lack of the coordination between the FSC and the battalion S-4 cause unnecessary friction and disjointed sustainment operations.

(U) TECHNIQUES AND PROCEDURES: Companies should bring their SOPs with them and use their NTC rotation as a proof of concept. The company commander, first sergeant, and executive officer have to be involved in the logistics process. The executive officer must ensure that the platoons are also incorporated in the process and that accurate logistics status reports are being filled out and sent to battalion on time. FSC commanders should conduct parallel planning with the battalion S-4 for each battle phase. Companies should create a maintenance SOP that outlines the maintenance process from start to finish. Companies also should establish a daily meeting to identify maintenance issues and form solutions. With proper emphasis at echelon, units will identify trends and will be able to correct maintenance problems.

(U) ART 4.1, Provide Logistics Support

(U) SOURCE: NTC

(U) Improve OBSERVATION 37

(U) SUBJECT: Mission authority for medical evacuation

(FOUO) OBSERVATION: Brigade combat teams often give mission authority for integration of ground and air assets to the brigade surgeon section (BSS).

(FOUO) DISCUSSION: The C medical company (C MED) commander is the mission authority for integration of ground and air assets. Several BCTs have given this mission authority to the brigade surgeon section (BSS). The BSS has limited manning (three personnel), and integration of ground and air evacuation assets is difficult. In one unit, the BSS was successful at integrating ground and air medical assets because the section was properly resourced with communication platforms and established the communication network early. C MED is organized and equipped to integrate air and ground medical assets.

(U) TECHNIQUES AND PROCEDURES: Whoever is designated as the mission authority for evacuation must be resourced with adequate personnel and communication systems. Clearly identify these communication systems through the brigade, and identify the communication network and flow of information. Use a common tier of communications at echelon.

(U) The designated mission authority for evacuation requires dedicated personnel, communication platforms, and SOPs. Incorporating battle drills into the daily rhythm of the section highlights shortfalls and facilitates solutions prior to mission execution. Additionally, clear understanding of the capabilities of the medical sections, including the aviation task force, will ensure the proper employment of evacuation assets across the battlespace.

(U) ART 4.3.2 Provide Medical Evacuation (Air and Ground)

(U) SOURCE: NTC

(U) Improve OBSERVATION 38

(U) SUBJECT: Company operations in an austere environment

(U) OBSERVATION: Many units arrive at NTC unpracticed at setting up and operating in a field environment.

(U) DISCUSSION: Company command posts initially are often unorganized and inefficient and lack essential information to facilitate mission command. Units often do not understand how to build a common operational picture to be used during planning and to share information down to the lowest level. Units frequently do not post higher missions and commander's intent or share this information across the company.

(U) TECHNIQUES AND PROCEDURES: Each company should regularly train in setting up and operating in a field environment. After action reviews (AARs) should be used to identify what items will be needed to operate efficiently and to help develop plans on how each item will be moved if required to jump. Additionally, unit leaders should teach the elements of mission command to their subordinate leaders. Leaders must establish a shared understanding and mutual trust to operate effectively when communications are limited. Each company should train on setting up a COP with friendly and enemy positions, along with maneuver graphics that replicate

a decisive action fight. Commanders then must brief the information to their subordinates, ensuring that the information makes it down to each Soldier. Junior noncommissioned officers (NCOs) should maintain and enforce discipline to support their chain of command while ensuring that the mission requirements are met. At the same time, senior leaders must empower their junior leaders to lead. NCOs need to be relied upon to a greater level to take some of the workload off of senior leaders.

(U) ART 5.2.1.1, Organize People, Information, Management Procedures, and Equipment and Facilities

(U) SOURCE: NTC

(U) Improve OBSERVATION 39

(U) SUBJECT: Flight operations vs. battle tracking

(U) OBSERVATION: Aviation operations personnel often focus too much on aircraft departure and arrival times instead of following the overall mission and what tasks the aircrews are performing, resulting in a lack of overall operational understanding.

(FOUO) DISCUSSION: Part of the information gap is that radio telephone operators (RTOs) and battle NCOs have little, if any, awareness of the missions being executed, reporting criteria, or shared operational understanding of what to expect from the ongoing mission. Battle tracking consists of much more than noting departure and arrival times of aircraft; the personnel operating in the main command post must be more invested in facilitating mission command.

(U) TECHNIQUES AND PROCEDURES: Current operations personnel should have a representative, preferably the S-3 noncommissioned officer in charge (NCOIC), attend all WARNORD, OPORD, and fragmentary order (FRAGORD) briefings. This representative should back-brief and coach the current operations team to ensure common understanding across the battle staff regarding current operations. Understanding the commander's information requirements, the mission, and the desired end state will enable the RTOs and battle staff to become more effective at processing information. Armed with the insight of knowing what to expect or to look for through all of the incoming and developing information from the battlefield will greatly streamline knowledge management. Commanders and staff interpret information received to gain understanding and to exploit opportunities, respond to developing threats, modify plans, or reallocate resources.

(U) ART 5.2.1, Conduct Command Post Operations to Support Tactical Operations

(U) SOURCE: NTC

(U) Improve OBSERVATION 40

(U) SUBJECT: Noncommissioned officer empowerment

(U) OBSERVATION: Units are challenged with NCO empowerment due to two factors: NCOs do not seem nested in the mission command philosophy, and NCO leadership is not being developed following the principles of leader development.

(U) DISCUSSION: Within many aviation formations, missions are more officer-driven, and NCOs are not utilized, are micromanaged, or are "spoon fed" what they are to do and not allowed to take initiative and gain experience. The result is that NCOs are not allowed to develop or to exercise adaptability or initiative. This creates a gap in leadership between the officers and the junior enlisted, leading to less effective teams.

(U) TECHNIQUES AND PROCEDURES: Most leader development occurs during operational assignments where leaders learn to develop through challenging, unfamiliar experiences that require them to adapt. Leaders learn from feedback, from making mistakes and seeking solutions. Fundamentally, leadership develops when the individual desires to improve and invests effort, when his or her superior supports development, and when the organizational climate values learning. A National Training Center rotation is a great opportunity to allow NCOs to take initiative, take ownership, and hone leadership skills. Feedback from internal AARs can be an effective tool for developing leadership skills. Learning to take risks and seeking non-textbook solutions, NCOs will also develop greater self-awareness by learning what they do not know, focusing on these gaps, and gaining new skills through self-development. Empowering NCOs by giving them a mission, encouraging ownership of that mission, and training during operations at the combat training center has been proven to improve overall effectiveness, competence, and confidence of NCO leadership at the individual and organizational level.

(U) ART 5.2.1.1, Organize People, Information, Management Procedures, and Equipment and Facilities

(U) SOURCE: NTC

(U) Improve OBSERVATION 41

(U) SUBJECT: Utilization of the SECRET Internet Protocol Router/Nonsecure Internet Protocol Router (SIPR/NIPR) Network Access Point (SNAP)

(U) OBSERVATION: SNAP terminals are not utilized.

(FOUO) DISCUSSION: SNAP utilization has not been a priority for several task force S-6 personnel or operators sent by the rotational unit to the SNAP class during reception, staging, onward movement, and integration. The SNAP is issued to the rotational unit to enable mission command and the combat trains command post, as BCTs do not have upper tactical Internet on their modified table of organization and equipment (MTOE) besides their command post node. Several BCT S-6s have been observed not embracing responsibility for this critical mission command system.

(FOUO) TECHNIQUES AND PROCEDURES: The SNAP is issued to the rotational unit to bridge the gap of limited MTOE equipment and allow rotational units to process reports and enhance their PACE communications plan during operations. The rotational unit should be aware that it will receive the SNAP for the duration of the rotation. The unit, starting with the brigade S-6 and down to the battalion S-6, should arrive at NTC with a plan to send operators through training, a plan for utilization, and effective tracking and assistance from the battalion S-6.

(U) ART 5.3.3, Establish the Information Network and Information Systems

(U) SOURCE: NTC

(U) Improve OBSERVATION 42 Return to Common Observations

(U) SUBJECT: Home station training proficiency on MTOE and other equipment

(FOUO) OBSERVATION: Soldiers do not properly train at home station on their systems.

(FOUO) DISCUSSION: Soldiers are constantly introduced to new systems and upgrades. Current systems are not maintained at home station with the current software updates, and Soldiers are not proficient in operating new or upgraded equipment. As a result, contractor support is required at JRTC and training time is taken away from the unit to get its systems operational in support of the brigade mission.

(U) TECHNIQUES AND PROCEDURES: Prior to arriving at JRTC, rotational units should emphasize maintenance on their systems to identify outdated software. Once at JRTC, system validations during the reception, staging, onward movement, and integration (RSOI) phase or situational training exercise lanes will significantly help units identify issues prior to force on force operations.

(U) ART 7.5, Conduct Tactical Mission Tasks

Chapter 3

Intelligence

(U) Sustains

(U) Sustain OBSERVATION 1

(U) SUBJECT: Unmanned aerial system (UAS) use

(FOUO) OBSERVATION: Units effectively use their UAS to provide reconnaissance around the brigade support area (BSA) and along main supply routes (MSRs).

(FOUO) DISCUSSION: Units that were UAS-equipped used that asset to provide reconnaissance of the area adjacent to the BSA, including MSRs leading to the BSA. The UAS provided the ability to monitor enemy activity directed at the BSA itself and at tactical convoy operations along MSRs. Two critical components leading to successful UAS use were training of operators and maintenance of equipment.

(U) TECHNIQUES AND PROCEDURES: Units should request UAS capability if it is not already assigned. Units should conduct training and use the asset in conjunction with the brigade combat team (BCT) reconnaissance plan. The battalion S-2 is a common staff proponent for UAS usage within the brigade support battalion.

(U) Army Tactical Task (ART) 2.3, Conduct Information Collection; ART 1-8, Conduct Reconnaissance

(U) SOURCE: Joint Readiness Training Center (JRTC)

(U) Sustain OBSERVATION 2

(U) SUBJECT: Conducting briefings in multinational environments

(U) OBSERVATION: Units continually improved in providing briefings such as mission analysis, course of action (COA) development, war gaming, and decision briefings in terms of speaking to the facts and overall comprehension.

(U) DISCUSSION: Soldiers in the unit improved toward ensuring that each topic ended with an assessment, allowing intelligence Soldiers to work toward greater clarity. Soldiers reviewed how to conduct intelligence briefings and create briefing outlines. Soldiers demonstrated the ability to speak to the problem under discussion using clear and concise sentences: one subject, one verb in active voice, and at least one object. When speaking, Soldiers used logical topical sequences. The commander’s guidelines regarding briefing the enemy situational template were based on time, space, tasks, purpose, and conditions. The commander’s guidance for intelligence Soldiers to brief enemy COAs enhanced clarity. Soldiers ensured that explanations and assessments directly related to operations graphics, and Soldiers answered questions directly.

(U) TECHNIQUES AND PROCEDURES: Intelligence Soldiers should sustain and continue to improve briefing content and styles. Soldiers should rehearse briefings in front of peers. Refer to Field Manual (FM) 6-0, *Commander and Staff Organization and Operations*, Chapter 7, Military Briefings.

(U) ART 5.1, Conduct the Operations Process

(U) SOURCE: Joint Multinational Readiness Center (JMRC)

(U) Sustain OBSERVATION 3

(U) SUBJECT: Information management

(U) OBSERVATION: The G-2s established a request for information (RFI) portal to receive, track, answer, and redirect incoming RFIs.

(U) DISCUSSION: The G-2s and the knowledge management (KM) section worked well together to develop the ability to redirect RFIs to the correct warfighting function as needed.

(U) TECHNIQUES AND PROCEDURES: Continue to develop the functionality of the RFI portal and enforce its usage so the G-2 and KM sections manage and track RFIs from receipt through answer. Because "unofficial" RFIs by telephone or email could be lost or go unanswered, redirect RFI submitters to the portal, of which the RFI manager provides the necessary oversight. References associated with this observation are Army Doctrine Publication 2-0, *Intelligence*, and Army Doctrine Reference Publication 2-0, *Intelligence*.

(U) ART 2.3.1, Plan Requirements and Assess Collection

(U) SOURCE: Mission Command Training Program (MCTP)

(U) Improves

(U) Improve OBSERVATION 1

(U) Subject: Developing an information collection plan

(U) OBSERVATION: Divisions' information collection plans were not fully synchronized with maneuver, resulting in an imbalance in weighted effort between answering priority intelligence requirements (PIRs) and targeting.

(U) DISCUSSION: The information collection plan (ICP) should answer as many of the commander's requirements as possible. Dynamic and/or ad hoc retasking of information collection assets indicates that the ICP is not fully synchronized with division maneuver. The collection manager ensured that the information collection plan was synchronized with the division's targeting efforts, but struggled to synchronize it with the maneuver plan. During the targeting working group (TWG), the collection manager briefed how division would address requirements, and then met with the division targeting officer to synchronize intelligence, surveillance, and reconnaissance (ISR) with fires. This level of effort did not occur with anyone in the G-3 section to ensure that the ICP also was synchronized with the scheme of maneuver and collecting against the commander's critical information requirements (CCIRs). In the

division's critical path, the operations synchronization (OPSYNC) meeting is designed to synchronize operations. The plans and operations operational planning team meeting reviews the commander's decision points. The G-2 representative presented the enemy current situation during these meetings, but did not present the ICP. As a result, the collection manager developed a plan heavily weighted in favor of targeting and less focused on answering the commander's PIRs.

(U) TECHNIQUES AND PROCEDURES: Incorporate collection management into the OPSYNC and Plans and Operations meetings. Make a recommendation regarding the balance of ISR assets within the ICP to address both targeting and collecting against PIRs in the plans and operations review board.

(U) ART 2.3, Conduct Information Collection

(U) SOURCE: MCTP

(U) Improve OBSERVATION 2

(U) Subject: Developing commander's critical information requirements

(U) OBSERVATION: Units developed CCIRs, consisting of PIRs and friendly force information requirements (FFIRs), prior to the beginning of the operation, but did not continuously refine CCIRs throughout the operation.

(U) DISCUSSION: Divisions' initial CCIRs did not link FFIRs and PIRs to a decision that the commander needed to make. Divisions did periodically update PIRs, but staff sections did not have a deliberate process to refine, update, or approve PIRs or FFIRs. When the PIRs were updated, staffs did not update how the PIR changes affected the decision support matrix.

(U) TECHNIQUES AND PROCEDURES: Each staff element should develop CCIRs during the planning process, and then refine them. The division should identify an agency to continually monitor and assess the CCIRs and how they lead to the commanding general's decisions. This will allow the commander and staff to understand the information regarding enemy and friendly forces that the division commander requires for effective decision making.

(U) ART 5.1.1.5, Develop Commander's Critical Information Requirements

(U) SOURCE: MCTP

(U) Improve OBSERVATION 3

(U) SUBJECT: Priority intelligence requirements

(U) OBSERVATION: Units did not maximize the effectiveness of PIRs.

(U) DISCUSSION: How a question is asked determines the answer received. PIR phrasing is effective if used in accordance with lessons derived from academic research and if modeled on success stories of previous commanders' critical information requirements. PIRs tended to be irrelevant during most of the training operation. PIRs were drafted, approved, and published within the military decisionmaking process (MDMP) planning cycle. PIR phrasing was broad and ambiguous, with no clear ties to the commander's decision points. Soldiers worked requirements not within PIR constructs but in accordance with the commander's ad hoc

guidance, high-payoff target lists, decision support matrices, and the output derived from redundant MDMP working groups. PIRs were ignored by planners and collectors.

(U) TECHNIQUES AND PROCEDURES: Leaders should develop PIRs that consist of one question with one interrogative, one subject, one verb, and at least one object tied to one decision point, in an operation timeline (for example, the latest time information is of value), to achieve the best answers.

(U) ART 2.3.2, Perform Intelligence, Surveillance, and Reconnaissance Integration

(U) Improve OBSERVATION 4

(U) SUBJECT: Brigade combat team information collection (IC) and synchronization

(FOUO) OBSERVATION: Synchronization of IC assets has consistently been a friction point, exacerbated by lack of a complete MDMP, lack of IC rehearsals, and a poor transition from plans to current operations.

(FOUO) DISCUSSION: PIRs and CCIRs often are not used to drive collection or decisions. Further, there is poor linkage between the named area of interest (NAI) and targeted area of interest.

(U) "Information collection is an activity that synchronizes and integrates the planning and employment of sensors and assets as well as the processing, exploitation, and dissemination systems in direct support of current and future operations. This activity implies a function, mission, or action and identifies the organization that performs it. Information collection activities are a synergistic whole with emphasis on synchronizing and integrating all components and systems. Information collection integrates the intelligence and operations staff functions focused on answering the CCIRs. Information collection replaces ISR synchronization and ISR integration." (FM 3-55, *Information Collection*, para. 1-4)

(U) "Information collection is the acquisition of information and the provision of this information to processing elements. This includes the following: plan requirements and assess collection; task and direct collection; [and] execute collection." (FM 3-55, para. 1-5)

(U) TECHNIQUES AND PROCEDURES: Units should solicit updated PIRs and revised NAIs. This will help ensure that assets are collecting against valid intelligence requirements in the correct location to support command decisions, staff processes, and effective advising efforts. The United States Army Training and Doctrine Command G-2 ISR integration office recommends the following:

- The most current IC matrix and NAI overlay should be posted to the BCT portal.
- The information collection synchronization matrix (ICSM) with NAIs and PIRs should be updated so collection assets receive a clear understanding of collection requirements.
- Redundancy should be built into the IC plan in case non-organic assets are unavailable because of weather or mechanical problems.
- The IC plan should maximize the use of nontraditional ISR.

(U) ART 2.1.4, Generate Intelligence Knowledge

(U) SOURCE: JRTC

(U) Improve OBSERVATION 5

(U) SUBJECT: Battalion use of intelligence

(FOUO) OBSERVATION: Battalions often are challenged in conducting their own intelligence-driven operations and often wait for brigade to direct specific operations.

(FOUO) DISCUSSION: Units do well at receiving and compiling data at their own level, but often fail to take action as a result of information they receive and process. This lack of action is a result of two observed challenges: S-2s frequently struggle to clearly present the "So what?" of their analysis; and units often fail to execute a targeting process.

(U) TECHNIQUES AND PROCEDURES: The unit executive officer or S-3 must ensure that a targeting process is in place, and the S-2 must be able to relay the "So what?" of his enemy analysis. Consistent communication by the S-3 with the S-2 should help facilitate the nomination of targets, routine adjustment in security levels, and even a change in security patrols.

(U) ART 2.4.1, Provide Intelligence Support to Targeting

(U) SOURCE: JRTC

(U) Improve OBSERVATION 6

(U) SUBJECT: Fundamentals of reconnaissance

(FOUO) OBSERVATION: Leaders from the troop commander down to the section level often do not know the fundamentals of reconnaissance or how to use those fundamentals to support operations.

(FOUO) DISCUSSION: Commanders failed to implement the fundamentals of reconnaissance into planning or execution. These fundamentals should serve as a checklist or provide guidance on mission execution at all levels throughout the squadron. At times leaders did not maintain continuous reconnaissance and contact with enemy forces. Without continuous contact (including audible and visual), the squadron was unable to provide a complete picture of the enemy for the brigade.

(U) TECHNIQUES AND PROCEDURES: The fundamentals of reconnaissance can be found in Training Circular 3-20.96, *Reconnaissance and Cavalry Squadron Collective Task Publication*, Page 2-38.

(U) ART 1.8, Conduct Reconnaissance

(U) SOURCE: JRTC

(U) Improve OBSERVATION 7

(U) SUBJECT: Improper terrain analysis

(U) OBSERVATION: Units that do not conduct proper terrain analysis, both with a map and on the terrain itself, may become decisively engaged or cannot support operations.

(U) DISCUSSION: Units that do not understand terrain have a difficult time in accomplishing the tasks required of them to support higher's intent. Army Tactics, Techniques, and Procedures

3-20.97, *Dismounted Reconnaissance Troop*, para. 2-57, states: "A properly conducted terrain analysis provides the commander with:

- Probable enemy locations.
- Tentative observation points and areas to patrol.
- Areas to concentrate his reconnaissance efforts and areas where he can accept risk.
- Areas where he can infiltrate or hide the movement of his units.
- Tentative positions to establish patrol or operation bases.
- Locations for sustainment operations."

(U) TECHNIQUES AND PROCEDURES: Proper terrain analysis can provide the commander from squadron and battalion level down to platoon leader a clear understanding of where forces need to be arrayed to accomplish their mission. Utilization of observation and fields of fire, avenues of approach, key terrain, obstacles, and cover and concealment (OAKOC) is a great tool to conduct terrain analysis, as well.

(U) ART 2.1.4.2, Obtain Detailed Terrain Information and Intelligence

(U) SOURCE: JRTC

(U) Improve OBSERVATION 8 Return to Common Observations

(U) SUBJECT: Intelligence preparation of the battlefield (IPB) and the scheme of maneuver

(FOUO) OBSERVATION: Units typically fail to incorporate IPB into their scheme of maneuver.

(FOUO) DISCUSSION: This often manifests as failing to account for enemy locations and key weapons systems. Company commanders fail to template enemy locations on their graphics, even when the locations templated by the S-2 are accurate. Following their commander's example, platoon leaders also do not account for enemy locations in their orders or graphics. As a result, the unit fails to plan a probable line of contact (PLOC) or probable line of deployment (PLD). As the unit executes its scheme of maneuver, it routinely enters into an enemy engagement area in a "traveling" movement technique until long-range anti-tank or other direct-fire weapons systems begin destroying its vehicles.

(FOUO) TECHNIQUES AND PROCEDURES: Commanders and platoon leaders must incorporate IPB into their planning process. By identifying probable enemy locations and weapons system ranges, the unit can more effectively plan maneuver. Commanders should habitually plan for the PLOC and create a graphic control measure such as a PLD to account for the necessary change in movement techniques (traveling, traveling overwatch, bounding overwatch). Graphic control measures must be disseminated down to the vehicle commander level at a minimum, preferably in both digital and analog formats.

(U) ART 1.2.2, Employ Combat Formations

(U) SOURCE: National Training Center (NTC)

(U) Improve OBSERVATION 9

(U) SUBJECT: Distributed Common Ground System–Army (DCGS-A)

(FOUO) OBSERVATION: Rotational training units (RTUs) at the NTC may not effectively employ DCGS-A as a truly federated intelligence processing and dissemination platform. The modified table of organization and equipment of battalions subordinate to the BCT varies, but it is common for DCGS-A intelligence fusion servers (IFS) to reside in the maneuver battalions. Historically, the battalions do not bring the IFS, resulting in a negative impact on the use of DCGS-A as a federated system due to limited bandwidth and server capacity.

(FOUO) DISCUSSION: DCGS-A does not function to its full capacity in a stand-alone mode. The common occurrence is that battalion S-2 shops are told to leave the IFS at home station either due to space constraints or because it will not be utilized. The IFS at brigade can hold approximately 12 clients, routinely between the brigade S-2 and the brigade intelligence support element. There are eight to 10 basic analyst laptops (BALs), leaving minimal server capacity for the subordinate battalion BAL. In addition to the server capacity issues, the tactical SECRET Internet Protocol Router Network (SIPRNET) is relatively slow due to the amount of bandwidth required for a BAL to access a remote server, which often causes authentication problems due to latency. The amount of time required to authenticate often leaves the analyst at the battalion level unable to utilize the Tactical Entity Database (TED) at the brigade. This, in turn, causes DCGS-A to be underutilized in a decisive action environment.

(FOUO) TECHNIQUES AND PROCEDURES: Units are successful in a decisive action training environment when the battalion S-2 shops bring their IFS. Units also are successful when the brigade and military intelligence (MI) company establish a plan to ensure that a military intelligence systems maintainer/integrator (35T) is capable of installing software updates and/or correcting hardware issues. It is recommended that the BCT 353T and DCGS-A field service representative install Virtual Machine software on IFS. Cross-train BCT information services technician (255A) and information technology specialist (25B) Soldiers to bring up forward servers. This will allow the MI company intelligence and electronic warfare section to remotely access the servers and to finalize system setup once upper tactical Internet (TI) is established across the BCT.

(U) ART 2.1.2, Establish Intelligence Architecture

(U) SOURCE: NTC

(U) Improve OBSERVATION 10

(U) Subject: Enemy air intelligence preparation of the battlefield

(U) Observation: The lack of analysis of the enemy air threat by the air and missile defense (AMD) cell and G-2 prior to the operations contributed to ineffective placement of short-range air defense (SHORAD) assets.

(U) DISCUSSION: The AMD cell and G-2 did not conduct enemy air IPB prior to the operation and struggled to anticipate the threat during the first three days of hostilities. Areas that must be analyzed during the enemy air IPB process include:

- Identifying enemy air avenues of approach
- Identifying when the enemy will employ air assets
- The capabilities of threat aircraft and missiles
- Possible locations of enemy airfields

The lack of analysis of the enemy air threat caused the division to distribute its SHORAD assets equally instead of focusing on specific threat areas. The AMD cell and G-2 made significant strides during the course of the operation and produced an enemy air situation template with enemy air avenues of approach and projected enemy airfields. This allowed the AMD cell to allocate air defense assets based on the predicted threat.

(U) TECHNIQUES AND PROCEDURES: The AMD cell and G-2 should collaboratively develop enemy air IPB and continually assess enemy air activity. The AMD cell should make recommendations to mitigate any gaps in air defense coverage for assets on the defended asset list to the protection working group for submission and approval at the targeting approval board.

(U) ART 6.1, Coordinate Air and Missile Defense

(U) SOURCE: MCTP

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Chapter 4

Movement and Maneuver

(U) Sustains

(U) Sustain OBSERVATION 1

(U) SUBJECT: Security during tactical convoy operations

(U) OBSERVATION: Units with dedicated gun truck assets (internal or external) were able to execute missions with minimal disruption from enemy actions.

(U) DISCUSSION: Support units have a limited number of available drivers. Using those drivers to operate gun trucks instead of a piece of support equipment reduces the unit's overall support capability. Despite the impact on mission support, units that dedicated personnel to operate gun trucks for a convoy security mission (or received external security assets) were able to move more freely around the area of operations (AO) and respond successfully to enemy actions. This ensured that the reduced number of logistics assets remained available for use and allowed the unit to continually support the brigade combat team (BCT).

(U) TECHNIQUES AND PROCEDURES: Units must consider convoy escort requirements and adjust their security posture based on the enemy situation. Internally or externally resourced security assets protect support assets and allow the unit to execute its sustainment mission.

(U) Army Tactical Task (ART) 1.3.3, Conduct Tactical Convoy

(U) SOURCE: Joint Readiness Training Center (JRTC)

(U) Sustain OBSERVATION 2

(U) SUBJECT: Brigade support area (BSA) establishment

(U) OBSERVATION: Units identified engineer asset requirements for creation of defensive positions.

(U) DISCUSSION: Units that struggle with BSA establishment often have not thought through the requirements associated with creating defensive positions. Units that were successful in creating a robust defensive plan that included individual fighting positions, berms, and command post force protection measures had requested engineer assets prior to establishing the BSA. These units were able to quickly set up a defensive perimeter and relieve Soldiers from security requirements to shift them to support missions.

(U) TECHNIQUES AND PROCEDURES: Planners must consider all assets available in order to rapidly establish the BSA with minimal impact on support operations. Coordinating for engineer support as part of the planning process instead of after the unit arrives ensures that the brigade support battalion receives dedicated engineer assets when required.

(U) ART 1.5, Occupy an Area

(U) SOURCE: JRTC

(U) Sustain OBSERVATION 3

(U) SUBJECT: Employment of M1134 Anti-Tank Guided Missile (ATGM) Strykers with a rifle platoon

(FOUO) OBSERVATION: A positive observation exhibited is that ATGM companies use dismounted infantry squads to clear terrain that would be a challenge for an ATGM platoon to do.

(FOUO) DISCUSSION: M1134 ATGM Strykers are vulnerable to dismounted infantry and vehicles as they travel over rolling terrain. M1134 Strykers need to be stationary to fire a tube launched, optically tracked, wire guided (TOW) missile. For this to happen, the commander's M240B machine gun needs to be placed in the stowed position to prevent it from being damaged. This limits the commander's ability to engage enemy dismounts and vehicles while traveling. While the ATGM company remains organic, it has challenges clearing terrain occupied by dismounted infantry and enemy vehicles. This changed when the company had a rifle platoon attached. Dismounted infantry squads were sent forward to clear intervisibility lines and wadi systems. Once the terrain was cleared, the ATGM Strykers could move forward unimpeded.

(FOUO) TECHNIQUES AND PROCEDURES: The ATGM company needs to be augmented with a rifle platoon to help clear terrain during offensive operations. This allows the ATGM Strykers to focus on the deep threat while the infantry carrier vehicles (ICVs) and dismounted infantry squads can focus on the near threat.

(U) ART 5.1.2.3 Task-organize for Operations

SOURCE: National Training Center (NTC)

(U) Improves

(U) Improve OBSERVATION 1

(U) SUBJECT: Improving the integration of attached units through increased understanding of unit capabilities

(U) OBSERVATION: In a multinational environment, understanding unit capabilities and limitations is vital to the conduct of interoperability.

(U) DISCUSSION: When working with multinational units, U.S. leaders must understand significant differences among allies' capabilities in the areas of staffing, equipment, and operational readiness. U.S. units must assume that attachments might arrive with significant gaps in operational or sustainment capabilities, including medical support, recovery assets, fire support vehicles, forward observers, obstacle breaching assets, anti-armor systems, night vision capabilities, mission command equipment, and even seemingly basic items such as cold/wet weather gear and sleeping systems. Multinational units might employ key systems differently, including combat vehicles. Prior to making decisions about tactical employment, or assigning tasks and purposes, unit leaders must identify these differences or shortcomings. Conversely, unit leaders must review their attachments' capabilities to identify any tactical opportunities, such as air defense equipment.

(U) TECHNIQUES AND PROCEDURES: The following are recommended:

- Generate discussions with attachments during the reception and staging process of integration. Face-to-face meetings among leaders to discuss tactics, doctrine, and national caveats can be very productive. Use comprehensive mission or environment-specific checklists to assess attachments' capabilities and identify shortcomings or opportunities.
- Develop company/team or task force task organization in a manner that cross-levels critical capabilities as required.
- Assign achievable tasks and purposes to attached units, based on candid discussions between leaders and staff from parent and attached units.

(U) ART, 7.6.1.1, Participate in Multinational Training Events and Exercises

(U) SOURCE: Joint Multinational Readiness Center (JMRC)

(U) Improve OBSERVATION 2

(U) SUBJECT: Actions on contact

(FOUO) OBSERVATION: Company-level leaders struggle with surviving first contact because they do not apply actions on contact. Leaders do not develop the situation and do not choose a course of action that will allow their unit to survive.

(FOUO) DISCUSSION: Mounted and dismounted units have difficulty surviving initial contact, and they become combat ineffective within minutes of being engaged by enemy forces. Leaders do not fix and destroy obvious enemy positions, and initiative is lost due to poor decisions at the point of contact.

(FOUO) TECHNIQUES AND PROCEDURES: To improve, units should emphasize actions on contact during home station situational training exercises and explain the importance of small-unit leaders' choosing and executing a course of action. Additionally, the use of tactical decision games during home station professional development will provide leaders the ability to comprehend the second- and third-order effects of their decision.

(U) ART 1.2.2.4, Conduct Actions on Contact

(U) SOURCE: NTC

(U) Improve OBSERVATION 3

(U) SUBJECT: Integrating fires and maneuver

(FOUO) OBSERVATION: Units below battalion level struggle to develop and execute a comprehensive plan that integrates fire and maneuver.

(FOUO) DISCUSSION: When units execute company-level and below combined arms live-fire exercises (CALFEX) at NTC, they demonstrate inexperience at synchronizing fires and maneuver. Fire support officers (FSOs) tend to plan triggers without adequately developing the

observer plan. FSOs should ensure that either their primary or alternate observer teams are in position to observe when the unit is expected to meet the criteria for each trigger. This causes the maneuver and fires plans to become desynchronized and greatly reduces the effectiveness of each fire mission. When commanders and mortar platoon leaders plan to employ their mortar teams, they struggle to plan mortar firing points that ensure those systems do not fire over Soldier's heads. The result is that the mortar teams are required to adjust their positions while the company or platoon is already engaged. This reduces the timeliness, and thus the effectiveness, of the fires being provided by the unit's organic fire support assets.

(FOUO) The other cause of desynchronized fires during company-level and below live fires is the lack of oversight by the unit's higher headquarters. Company- and platoon-level lanes are treated as individual events run by that commander and the observer-coach/trainers (OC/Ts) supporting the lane. Generally, a field grade representative from the parent unit goes out to observe the preparation and execution of the lane, but the staff is not involved with either aspect. The lack of staff involvement denies junior FSOs and their teams from receiving guidance and quality control over their plan.

(FOUO) TECHNIQUES AND PROCEDURES: More emphasis on fire support planning and execution is needed during the unit's preparation to deploy to the National Training Center. Forcing company-level fire support teams to develop a fire support plan and then walk the terrain with their commanders in order to develop a more realistic understanding of the speed of an operation would allow those teams to develop a more realistic understanding of when triggers should be planned. Also, battalion staffs should be encouraged to play a bigger role in supporting company- and platoon-level CALFEXs. Junior FSOs will benefit from having more experienced personnel look at their fire support plan to help them improve it. Quality assurance/quality control, in most cases, will help provide a more effective fire support plan.

(U) ART 3.1, Integrate Fires

(U) SOURCE: NTC

(U) Improve OBSERVATION 4

(U) SUBJECT: Terrain selection for support-by-fire positions during a combined arms breach

(FOUO) OBSERVATION: Units conducting live-fire exercises at NTC, whether brigade or company level, are making poor terrain selection for their support-by-fire positions.

(FOUO) DISCUSSION: When selecting a support-by-fire position, a unit should consider not only the distance to the objective or projected enemy forces, but also the angle of its direct fires in reference to the movement of friendly units to the planned breach site. On several occasions units have placed their support-by-fire positions either with too much standoff or at a bad angle with reference to the breach site and friendly units. The first error not only degrades target acquisition but also decreases the amount of effective direct fires to destroy or suppress targets on the objective. The second error results in the outright elimination of direct-fire suppression of the enemy forces because fires must be lifted in order to facilitate the movement of engineers and local support-by-fire elements to the breach site.

(FOUO) TECHNIQUES AND PROCEDURES: Units conducting live-fire exercises at NTC must conduct not only a thorough map reconnaissance of their objectives and routes; units also must conduct reconnaissance of their objectives through observation posts that can be placed throughout the avenue of approach to the breach site. These reconnaissance elements can relay information about the mobility corridors and can recommend support-by-fire positions and breach sites based on their observations of the terrain and the size of the unit.

(U) ART 7.5.26, Support by Fire the Maneuver of Another Friendly Force

(U) SOURCE: NTC

(U) Improve OBSERVATION 5

(U) SUBJECT: Dispersion between vehicles in maneuver formations

(FOUO) OBSERVATION: Units struggle to maneuver with dispersion when transitioning from different movement techniques.

(FOUO) DISCUSSION: Mounted maneuver lacks consistent dispersion between mutually supporting sections and individual vehicles. This can be attributed to both a lack of maneuver terrain and maneuver restrictions imposed during home station training. While traveling on open terrain, units tend to open their formations and have anywhere between 100 and 300 meters of dispersion; yet, once the terrain becomes restrictive in areas such as an intervisibility line, units will default to the first trail that is identified and move into column formation with little dispersion between elements.

(FOUO) TECHNIQUES AND PROCEDURES: To improve the dispersion between units in restrictive terrain, a detailed map reconnaissance of both joint capabilities release imagery and satellite imagery at the platoon level would help identify trails where units can maneuver vehicles. This would better identify dismount points for infantry to pull vehicles forward and allow sections and individual vehicles to select and map out their routes prior to conducting their operation.

(U) ART 6.6.2, Disperse Tactical Forces

(U) SOURCE: NTC

(U) Improve OBSERVATION 6

(U) SUBJECT: Establishment of the probable line of deployment (PLD)

(FOUO) OBSERVATION: The transition from movement to maneuver is a critical decision point for an SBCT company commander. When executed at the appropriate time and location, the decision can enable both audacity and survivability.

(FOUO) DISCUSSION: The SBCT company manual illustrates in detail the implementation of the PLD. The PLD is derived from a combination of terrain and enemy analysis. While sometimes the same as the probable line of contact, it may sometimes be several hundred meters removed. For example, in a recent task force operations lane, a Stryker infantry company determined the probable line of contact with the enemy based on enemy analysis. The

commander used this analysis to determine where he would dismount his ICVs and conduct his dismounted approach march to the objective. Unfortunately, the terrain did not support his anticipated dismount. Ultimately, his PLD needed to be approximately 800 meters farther away from the objective. The impact on the mission was significant because the misplacement of the PLD caused the destruction of three ICVs and the loss of the squads on board, thereby reducing the company's combat power by a third and compromising the forward line of troops.

(FOUO) In a subsequent mission during the force on force battle period, a Stryker infantry company achieved success with a deliberate transition from movement to maneuver along the PLD. While assigned operational control to the CAV squadron with the task to conduct a movement to contact, the unit successfully took initiative, seized key terrain, and gained surprise through dismounted maneuver. The S-2 enemy template, confirmed by scout reconnaissance, determined the enemy disposition with a great degree of accuracy. The commander analyzed the terrain and identified where the company would transition from mounted movement to dismounted maneuver prior to contact with the enemy battle position. The company advanced across the gap using a "push-pull" method with its platoons dismounted approximately 800 meters to 1 kilometer in advance of the ICVs. As the battle unfolded, the attached Prophet signals intelligence system team collected information confirming that the enemy had positive identification of the company's ICVs, but had no identification of the dismounted squads leading the maneuver. When the opposing force sent a combat reconnaissance patrol team to interdict the ICVs, the unit gained surprise by making direct-fire contact first with its dismounted Javelin teams.

(FOUO) TECHNIQUES AND PROCEDURES: The PLD is normally a phase line or checkpoint where elements of the attacking company transition to secure movement techniques in preparation for contact with the enemy. Based on observations of successful and unsuccessful SBCT infantry company offensive operations, it seems as though the dismounted approach is the only secure movement technique appropriate to an offensive operation. This deduction is particularly the case when maneuvering against a hybrid or combined arms threat. The dismounted approach march movement to contact technique provides the offensive unit the following advantages: it increases the enemy's difficulty in acquiring and engaging dismounted targets, and it allows for surprise and audacity. Removing the squads from the much larger target of an infantry carrier vehicle increases the likelihood of their survival en route to the objective. Fire teams during dismounted maneuver become collection sensors reporting enemy activity, thus creating a significantly better situational understanding of enemy composition and disposition. Using a PLD to determine the transition from mounted movement to dismounted maneuver enhances mission command by taking the guess work out of the fight for platoon and squad leaders. The PLD provides a decision point for the platoon leader to discuss with the squad leaders during platoon troop leading procedures when they rehearse actions on PLD. The significance here is that when spread out to use terrain for maximum concealment, not every ICV arrives at the PLD at the same time or same location. Making the PLD a phase line as opposed to a coordination point provides vehicle commanders and platoon leaders more flexibility with which to achieve the intent.

(U) ART 1.3, Conduct Tactical Troop Movements

(U) SOURCE: NTC

(U) Improve OBSERVATION 7

(U) SUBJECT: The decision to bypass or breach

(FOUO) OBSERVATION: Most task forces, combined arms battalions, or maneuver company/teams bypass enemy obstacles only to end up in the enemy's engagement areas.

(FOUO) DISCUSSION: When faced with an enemy obstacle, battalion or company/team commanders consistently choose the easiest bypass available around the obstacle. The units attempt to maintain tempo and momentum against the enemy by choosing not to commit to breaching enemy obstacles. When the enemy obstacle is formidable, the commander prefers to bypass it instead of clearing a lane in the obstacle. The attached engineer formations are usually last in the order of travel for the combined arms battalion and are rarely committed to the fight. The engineer reconnaissance teams should be placed with the scouts or the lead element to provide feedback to the task force on obstacles and potential engagement areas. Engineer elements at the battalion and company levels are not providing bottom-up refinement of enemy obstacle belts to allow the battalion staff to advise the commander on the best way to shape the fight.

(FOUO) TECHNIQUES AND PROCEDURES: Successful combined arms battalions use engineer reconnaissance teams to help identify potential safe bypass routes and/or points to breach enemy obstacles without violating the characteristics of the offense.

(U) ART 1.6.1, Overcome Barriers, Obstacles, and Mines

(U) SOURCE: NTC

(U) Improve OBSERVATION 8

(U) SUBJECT: Engineer reconnaissance integration

(FOUO) OBSERVATION: Neither maneuver nor engineer units are proficient in integrating engineer reconnaissance requirements and assets into the task force (TF)/BCT intelligence, surveillance, and reconnaissance (ISR) plans.

(FOUO) DISCUSSION: Engineer reconnaissance requirements must be fully integrated into the overall TF/BCT reconnaissance plan. Failure to identify and prioritize engineer-related intelligence requirements (IRs) may leave gaps in intelligence that put the overall mission at risk. Often, obstacle intelligence is incomplete or lacking altogether. Establishing engineer IRs is critical. They must be integrated into the TF/BCT priority intelligence requirements (PIRs). Additionally, using engineers as part of the reconnaissance can result in more thorough obstacle reconnaissance and a better understanding of the battlefield. Engineer reconnaissance teams are one method to answer engineer IRs within the framework of the TF/BCT ISR plan. Regardless of the method or source, it is critical to identify individual obstacles and their size, composition, and orientation. This allows commanders to conduct deliberate breach planning and/or bypass. This detailed obstacle information also can be assembled into an enemy obstacle plan, indicating enemy location and size and confirming the enemy course of action.

(FOUO) TECHNIQUES AND PROCEDURES: Units are successful in a decisive action training environment when they identify and prioritize engineer IRs and then integrate engineer reconnaissance requirements and assets into the ISR plan. Detailed information enables deliberate planning and allows the commander to better weight his main effort. Commanders

must train their staff, particularly the S-2 and engineer, to integrate engineer IRs and available engineer reconnaissance elements into the TF/BCT ISR plan per Army Techniques Publication (ATP) 3-34.81, *Engineer Reconnaissance*, and ATP 3-34.22, *Engineer Operations Brigade Combat Team and Below*. Engineer officers in units supporting maneuver units must be prepared to integrate into their staffs, particularly if the unit does not have an assigned staff engineer.

(U) ART 1.1.2.4, Participate in Tactical Reception, Staging, Onward Movement, and Integration Activities

(U) SOURCE: NTC

(U) Improve OBSERVATION 9

(U) SUBJECT: Engagement area (EA) development

(FOUO) OBSERVATION: Rotational units are not following doctrinal procedures and considerations regarding EA development.

(FOUO) DISCUSSION: During defense, the weapons company typically contributes to the success of the mission by employing long-range direct fires to destroy enemy forces. The mobility, combat power, and optics make the weapons company an invaluable tool for the battalion commander to utilize in the defense. Over the past several rotations, units have had the implied task to develop an EA to defend and mass fires on critical points in the battlefield. The steps and sub-steps of EA development are outlined in Field Manual (FM) 3-21.12, *The Infantry Weapons Company*, for the weapons company to utilize for success.

(FOUO) TECHNIQUES AND PROCEDURES: Highlighted in this section are steps and sub-steps of EA development that are commonly disregarded or are executed poorly:

- **Identify likely enemy avenues of approach**: Rotational weapons companies and platoons often skip initial reconnaissance of the EA, or they conduct the reconnaissance too hastily and fail to do it from the enemy's perspective.

- **Determine enemy scheme of maneuver**: Units consistently fail to refine the enemy situation as it pertains to their level. Many companies under-utilize the company intelligence support team (CoIST), or do not have an operational CoIST at all, to assist the leadership in describing the fight from the enemy's perspective. Units do not completely think through and disseminate to subordinates how the enemy will structure the attack, in what formation or sequence, etc.

- **Determine where to kill the enemy**: Weapons companies often fail to properly plan for and disseminate direct-fire control measures that match the enemy's scheme of maneuver. At best, it has been observed that the company commander will have graphics on a map overlay. Often, however, no direct-fire control measures are utilized.

- **Emplace weapons systems**: Units often ignore key steps in emplacing weapons systems. Units rarely drive the EA to confirm that selected positions are tactically advantageous. Units rarely plan for alternate and supplementary fighting positions to achieve desired effects.

- **Conduct an EA rehearsal**: EA rehearsals often are poorly conducted or not conducted at all. Coaching focuses on replicating the threat and conducting rehearsals to improve the defense of the EA, especially pertaining to the use of fire commands, triggers, and displacement criteria.

(U) ART 7.2.2.2, Defend an Area of Operations

(U) SOURCE: JRTC

(U) Improve OBSERVATION 10

(U) SUBJECT: Understanding capabilities of the TOW weapon system

(U) OBSERVATION: Rotational units tend to lack understanding of the TOW weapon system.

(FOUO) DISCUSSION: Rotational units demonstrate a solid understanding of crew-served weapons such as the M240B and .50 caliber M2, but most lack the ability to effectively emplace the tube launched, optically tracked, wire guided (TOW) missile weapon system. Lack of clear line of sight to the target and target standoff are the biggest challenges for employing the TOW system for units rotating through JRTC. Soldiers do not understand the capabilities of the TOW variants, such as different arming ranges. Some gunners are inexperienced at system setup and lack knowledge of how to properly emplace the improved TOW aiming system (ITAS). During the past four rotations, some units have not kept their batteries for the system charged, or have lost cables that make the system function properly.

(FOUO) TECHNIQUES AND PROCEDURES: Some rotational units have demonstrated a solid understanding of the capabilities of the TOW weapon system and how to effectively employ it. The units that were successful usually had a senior noncommissioned officer who was an 11H as well as gunners and leaders who attended the heavy-weapons leaders course. Ultimately, if unit leaders would simply read basic manuals that provide information on how to implement the TOW weapon system, we would have better-trained units. Additionally, leaders in antitank companies must attend the right schools (i.e., the heavy-weapons leaders course) to further their education on the capabilities and components of the weapon system.

(U) ART 1.4.1, Conduct Lethal Direct Fire Against a Surface Target

(U) SOURCE: JRTC

(U) Improve OBSERVATION 11

(U) SUBJECT: Air assault planning process

(FOUO) OBSERVATION: Ground brigades are challenged in understanding the air assault mission planning process.

(FOUO) DISCUSSION: Aviation battalions or TF-level units are accustomed to working for an aviation brigade. The aviation brigade understands the information that its subordinate battalions need to facilitate the planning process in support of air assaults or complex air movements. At NTC, the aviation TF is working for a ground brigade that usually does not understand the air assault mission planning process. Additionally, aviation TF leaders often come to NTC from attack battalions, and they frequently lack a lift/assault planner on their staff. The brigade aviation element (BAE) usually is composed of attack or scout pilots, as well. All of this

means that the information needed to plan lift operations is not received in a timely manner. The BAE and aviation TF S-3 shop usually do not ask for the essential information and do not aggressively get involved in planning. Assault companies usually receive very little information initially, and although they submit requests for further information, they usually do not receive answers until about 24 hours before mission execution. Ground unit commanders often do not recognize their role in running the planning process as the air assault TF commander, one level up from the ground force commander in the operation. The aviation TF often takes on the role of developing and conducting the required briefings. Additionally, ground tactical plans are almost never approved prior to the air mission coordination meeting, and air assault TF commanders brief their senior leaders on the plan after the air mission brief, resulting in major changes to the mission at the last minute. Some of this probably stems from the brigade's composition and previous training. Finally, NTC usually hosts heavy (armored) units, which typically are not familiar with conducting operations utilizing lift aircraft support.

(FOUO) TECHNIQUES AND PROCEDURES: Units must conduct air assault and air movement training at home station. Ground units, including armored units, must train and execute air assaults with their aviation brigade to become familiar with the planning process and their responsibilities. Aviation TFs should mentor the ground forces to teach them the process and their responsibilities, but not completely take over. Aviation units should attach an experienced lift/assault liaison officer (not a new pilot out of flight school) to each attack battalion's planning cell, and should be prepared to attach one to the BAE, if needed. Units should share their air mission coordination meeting checklist with supported ground units while explaining the importance of following it as soon as possible after the working relationship has been identified. To improve the planning process, units should rehearse several iterations. Ground and aviation units should communicate to develop relationships and improve training.

(U) ART 1.2.1.1.2, Conduct an Air Assault

(U) SOURCE: NTC

(U) Improve OBSERVATION 12

(U) SUBJECT: Counterinsurgency-style employment of attack and reconnaissance aviation in decisive action (DA) operations

(FOUO) OBSERVATION: Rotational units routinely fail to employ attack and reconnaissance aviation assets in a deliberate role during DA operations.

(FOUO) DISCUSSION: As discussed previously in Center for Army Lessons Learned Newsletter 15-04, *Joint Readiness Training Center Decisive Action Training Environment Trends FY 2013–FY 2014*, attack and reconnaissance aviation units are routinely ordered to provide maximum coverage in "mission windows" during DA operations. The intent for these "windows" is to provide maximum mission coverage and remain a responsive reinforcement for the ground force commander. However, the result is often ineffective team-level employment and use primarily as a close combat attack asset.

(FOUO) In a DA environment against a near-peer threat with sophisticated capabilities, employment as a single attack weapons team has repeatedly proven ineffective. Teams responding to troops in contact situations revert to counterinsurgency tactics and typically fly higher as they attempt to use their sensors to gain understanding of both the friendly and enemy situations. This allows the enemy force to engage the aircraft with man-portable air defense systems or air defense artillery assets.

(FOUO) Ground force commanders will gain a decisive advantage by employing attack and reconnaissance aviation assets in conjunction with manned and unmanned teaming in a deliberate manner in accordance with the characteristics of the offense. Attack and reconnaissance aviation units utilized as a maneuver force to conduct movements to contact and interdiction attacks will be able to find, fix, and destroy the enemy by massing fires of multiple assets at a specific place and time.

(U) TECHNIQUES AND PROCEDURES: The roles of attack and reconnaissance aviation units are defined in FM 3-04, *Army Aviation*, and missions are further expanded upon in FM 3-04.126, *Attack Reconnaissance Helicopter Operations*. Attack and scout aviation lessons learned and best practices can be found at http://www.jrtc-polk.army.mil/OPS/.

(U) ART 7.5.1, Attack by Fire an Enemy Force or Position

(U) SOURCE: JRTC

(U) Improve OBSERVATION 13

(U) SUBJECT: Inefficient Use of Lift Assets

(FOUO) OBSERVATION: Lift aircraft often are not used to their full capability to support the decisive action-style fight at NTC.

(FOUO) DISCUSSION: A DA fight requires units to jump their tactical assembly area (TAA) as the fight progresses. Aviation task forces tend to rely heavily on their ground convoys to move their equipment from one TAA to the next, while utility helicopters and cargo helicopters usually are not filled and make only one trip between TAAs. Establishment of subsequent TAAs often is delayed because essential equipment is held up in a convoy while lift aircraft sit on the ground unutilized. Lift assets provide the capability to insert reconnaissance elements forward to provide commanders early warning on enemy avenues of approach and composition. Some rotational units use lift aircraft to insert reconnaissance teams, but most do not. The information from these reconnaissance teams could shape both ground and air maneuver plans to defeat the enemy, while maximizing the effectiveness of indirect fires. Additionally, lift aircraft have the ability to conduct gun raids, allowing increased range of indirect-fire support for maneuver elements.

(FOUO) TECHNIQUES AND PROCEDURES: Incorporate lift aircraft for the TAA jump plan. Airlift essential equipment that needs to be set up quickly to facilitate mission command. Ground commanders need to understand the benefits of using reconnaissance forces to secure key terrain and provide updates on enemy activities, or to conduct gun raids to support maneuver elements.

(U) ART 4.1.2.3.2, Move by Air

(U) SOURCE: NTC

(U) Improve OBSERVATION 14

(U) SUBJECT: Aeromedical evacuation integration into the air assault planning process

(FOUO) OBSERVATION: Aviation task forces and forward support medical evacuation (MEDEVAC) platoons struggle to integrate the air ambulance into the planning processes for air assault missions.

(FOUO) DISCUSSION: Due to the general support missions conducted by air ambulance companies during the past 14 years of counterinsurgency operations, integration into air assault planning in a direct support relationship has become a lost art for forward support MEDEVAC platoons and air ambulance crews. As a result of this lack of integration, crews demonstrate limited knowledge of the operational environment and a lack of synchronization and integration of the air ambulance into the health service support plan. This can cause catastrophic effects during a decisive action conflict. Without synchronization of the larger air assault scheme of maneuver, air ambulance crews could fly through gun target lines, pre-planned artillery targets, scout weapons team and attack weapons team battle positions, and air assault routes, potentially impeding the ground force commander's ability to build combat power on the objective.

(U) TECHNIQUES AND PROCEDURES: FM 3-99, *Airborne and Air Assault Operations*, outlines the responsibility of air ambulance company planning and integration within the health service support plan for air assault operations. Figure 9-2 in FM 3-99 outlines key participants in air assault planning steps; in particular, the air ambulance company's attendance and briefing role in the air mission coordination meeting, air mission brief, aircrew brief, aviation task force rehearsal, and combined arms rehearsal. Additionally, Chapter 9, Section VII, covers the responsibilities and key roles of the evacuation platoon leader from the BCT support medical company and the forward support MEDEVAC platoon (FSMP) leader in medical evacuation planning for air assault operations. With input from the air assault task force S-1, S-3, and S-4; the brigade aviation element; the S-3 from the supported unit; the BCT surgeon section; and the brigade support medical company commander, the FSMP leader should take a key role in the following (FM 3-99, para. 9-72):

- Integrating ground evacuation measures into the overall medical evacuation plan
- Planning medical evacuation routes to Level II or III health care facilities and ensuring that all aircrews participating in the air assault know these routes
- Coordinating for medical personnel to fly on casualty evacuation aircraft if time and situation permit
- Ensuring that medical evacuation crews are available for air assault orders, rehearsals, and preparations
- Briefing casualty collection point (CCP) locations and markings during the air assault rehearsal
- Planning to maintain a forward arming and refueling point (FARP) after the air assault is completed so that MEDEVAC aircraft have a staging place for follow-on operations

(U) Overall, it is the air ambulance company and FSMP leadership's responsibility to properly coordinate and integrate all forms of medical evacuation into the BCT health service support plan for air assault operations.

(U) ART 1.2.1.1.2, Conduct an Air Assault

(U) SOURCE: JRTC

(U) Improve OBSERVATION 15

(U) SUBJECT: Accounting for surface danger zone during maneuver

(FOUO) OBSERVATION: Maneuver units were disrupting planned indirect-fire missions because the units did not plan down to the correct level of detail and consider the Area E of the position area of artillery (PAA) into their scheme of maneuver.

(FOUO) DISCUSSION: Area E is the area of the surface danger zone directly in front of the muzzle and extending where the trajectory of the round is still low enough to the ground to pose a significant danger to ground forces. Therefore, the field artillery cannot safely fire unless this area is clear of friendly forces. During NTC rotations, there were multiple units whose route selection caused them to enter Area E of the PAAs, which were established before the units began phase one, movement. This lack of synchronization between the supporting field artillery and the maneuver units resulted in major delays, affecting the planned course of action leading up to the objective and through the beginning stages of the breach. By the time the firing battery was cleared to resume firing, the lead maneuver element was exposed to the enemy in and around the objective without cover or planned obscuration necessary to begin the next phase of the deliberate attack on the objective. Another factor is that company leaders did not conduct adjacent unit coordination with sister units outside of the immediate parent unit's task organization. This is because home station training is conducted in a very controlled manner in which units are isolated, based on feedback from observer-coach/trainers (OC/Ts) supporting the rotation as well as the rotational units themselves during the after action review (AAR) process.

(FOUO) TECHNIQUES AND PROCEDURES: Battalions and companies need help improving adjacent-unit coordination and supporting the higher echelon. Companies and battalions often plan their scheme of maneuver in a vacuum and do not account for other units, particularly those that are affiliated with different warfighting functions. Company commanders must communicate with other company commanders to ensure that their plans are in sync with other units operating within their area of operations/area of responsibility (AO/AOR) that are not attached to their parent battalion or brigade. Company, platoon, and squad situational training exercises should incorporate multiple units within the brigade so units become accustomed to conducting adjacent-unit coordination outside of their own battalions. Furthermore, company and battalion leaders should utilize Department of the Army Pamphlet 385-63, *Range Safety*, to understand the intricacies of surface danger zones by munitions type. Echelons above brigade should incorporate surface danger zone training into their schoolhouses or coordinate to bring an inter-Service range safety course mobile training team from the Sustainable Range Program to their installation. If time and space are an issue, it is recommended that leader professional development be conducted to help define what right looks like under controlled circumstances as well as trends that are seen based on feedback from an adjacent unit or directly from a combat training center (CTC). All CTCs have the ability to help support learning outside of the training location; if an organization is interested in learning about the latest trends or communicating with CTC subject matter experts, that resource is readily available upon request.

(U) ART 6.9.5.4, Engage Hostile Target

(U) SOURCE: NTC

(U) Improve OBSERVATION 16

(U) SUBJECT: Reception, staging, onward movement, and integration (RSOI)

(FOUO) OBSERVATION: Units tend to merely tally personnel, equipment, and vehicles during the RSOI phase of the operation.

(FOUO) DISCUSSION: RSOI operations consist of four segments necessary for commanders to build combat power. These segments are:

- **Reception**: Unload personnel and equipment from strategic transport assets, managing port marshaling areas; transport personnel, equipment, and materiel to staging areas; and provide logistics support services to units transiting the ports of debarkation.
- **Staging**: Organize personnel, equipment, and basic loads into movement units; prepare units for onward movement; provide logistics support for units transiting the staging area.
- **Onward movement**: Move units from reception facilities and staging areas to the tactical assembly or other theater destinations; move non-unit personnel to gaining commands; and move sustainment supplies to distribution sites.
- **Integration**: Synchronize the transfer of capabilities into an operational commander's force prior to mission execution.

(FOUO) Units conduct RSOI like a sustainment function (tallying personnel, equipment, and vehicles) for efficiency in tracking and reporting. However, unit readiness during RSOI is an operational matter.

(U) TECHNIQUES AND PROCEDURES: Operationalize RSOI. Task-organize enablers to the BCT during the planning and preparation cycle of the operations process. Follow the principles of RSOI:

- **Unity of command**. One commander should control and operate the RSOI process, adjusting resources based on deployment flows, controlling movements in the area of operations, and providing life support to arriving personnel.
- **Synchronization**. Synchronization occurs when the right units, equipment, supplies, and capabilities arrive in the correct order at the appropriate locations, and supporting activities are coordinated to operate with one another to ensure that the tempo of deployment is uninterrupted.
- **Unit integrity**. Moving unit personnel and equipment on the same strategic lift platform provides distinct advantages for units and the force closure process. It leverages the strength of the chain of command, simplifies force tracking, and increases training opportunities. Maintaining unit integrity during strategic lift can simplify the RSOI challenge of incrementally building combat power.
- **Balance**. Defining the size of the required support structure is essential to effectiveness. The goal is to avoid burdening strategic lift, infrastructure, and the commander with more support than is necessary, yet deploy assets necessary to optimize throughput of units and materiel. Supporting assets must be deployed in a properly timed sequence to leverage their capabilities. Increasing the RSOI capability to clear backlogs in ports and staging areas can be a tool to reduce force vulnerability.

(U) ART 1.1.2.4, Participate in Tactical Reception, Staging, Onward Movement, and Integration Activities

(U) SOURCE: JRTC

ECHELON HEAVY DROPS - PRIORITY VEHICLE LIST (PVL)												
#	CHALK		UNIT		PM MODEL	PM BUMPER #		PM SERIAL #	TRAILER (TOWED LOAD)	TRAILER BUMPER#		TRAILER SERIAL#	USE/PURPOSE
1	1A		BSB					D					Water Resupply
2	Notional		2P		M1097A2	HQ95		183988					Resupply
3	Notional		2P		M1167	D12		343158					AT Support
4	Notional		2P		M1167	D13		343301					AT Support
5	Notional		2P		M1151	PP232		316946					Mission Command
6	Notional		2P		M1151	PP183		248722					Resupply
7	Notional		161st ESC		950B (Loader)	251		LWK271					LARP
8	Notional		161st ESC		130G (Grader)	310		07GB01893/UE05J2					LARP
9	Notional		161st ESC		FLU-117 (SEE)	127		1FG999994JM451070					LARP
10	Notional		161st ESC		M1094 w/ FAS Box	JRTC Draw		JRTC Draw					LARP
11	Notional		161st ESC		CS-433 (Roller)	214		1XZ00003					LARP
12	Notional		5-73		M1151	HQ6X		304965					Mission Command
13	Notional		5-73		M1151	HQ3X		314598					Mission Command
14	Notional		5-73		M997	HHT72		54241					Resupply
15	Notional		5-73		M1152	HHT7		337808					Resupply
16	Notional		5-73		M1152	HHT51		337789					Resupply
17	Notional		1-319		M1097A2	A21		141165	M119A2	1A21		284	IDF Support
18	Notional		1-321						M777A2	CH3		935	IDF Support
19	Notional		BSB		M1165	JRTC Draw		JRTC Draw					A/DACG
20	Notional		BSB		M1165	JRTC Draw		JRTC Draw					A/TLS
21	Notional		BSB		M1165	HQ6A		338751					Mission Command
22	Notional		BSB		FARE	A301		10T2K1J29K1039302					CL III Resupply
23	Notional		BSB		FAWPASS	A313		10TGJ6Y106S088388					Water Resupply
24	Notional		BSB		M1097A2	240-1		206892	HP4 (DRASH)	HOT GEN		8T0111/200110	Forward Surgical Team
25	Notional		HHC BDE		M1097A2	HQ286		6700385					SHARK
26	Notional		1-319		M1097A2				M119				IDF Support

(U) Figure 4-1. Example of a priority vehicle list.

(U) Improve OBSERVATION 17

(U) SUBJECT: Building combat power within the area of operations

(FOUO) OBSERVATION: Units do not fully develop and use a priority vehicle list (PVL).

(FOUO) DISCUSSION: Units often experience difficulty building combat power that accounts for unit capabilities and mission requirements prior to executing joint forcible entry operations. Priority vehicle lists are a technique for BCTs to synchronize their movement plan with their combat power requirements to execute and maintain momentum during their initial entry. Units that struggle with building combat power that supports and sustains the maneuver plan rarely have priority vehicle lists at all, or have ones that are incomplete and do not reflect mission requirements. Additionally, units that attempt to move in under a "unit pure" organization often have support and enabler units that are not prepared to provide their own security or recovery support during movement.

(U) TECHNIQUES AND PROCEDURES: Units should develop a movement plan that accounts for mission requirements and unit capabilities instead of strictly building combat power through "unit pure" movements. An established technique to synchronize unit combat power build is a PVL that identifies the march unit; march serial that a piece of equipment is moving within; and the responsible unit, capability, and timeline. (See Figure 4-1)

(U) ART 1.1.2.4, Participate in Tactical Reception, Staging, Onward Movement, and Integration Activities

(U) SOURCE: JRTC

(U) Improve OBSERVATION 18 Return to Common Observations

(U) SUBJECT: Planning and executing tactical convoy operations

(FOUO) OBSERVATION: Units struggle to effectively implement troop leading procedures (TLPs) as they prepare for tactical convoy operations (TCOs).

(FOUO) DISCUSSION: This task is specific to the planning of TCOs. Subordinate units that did not receive orders in a timely manner consistently struggled to execute TLPs properly. Mission planning generally consisted of reception of mission, an ill-defined timeline for execution, and a hasty determination of the available personnel and equipment. Because of consistently short timelines, units were not able to exercise responsible rest plans. As a result, Soldiers were exhausted. Leaders were not fully attentive to be able to execute reasonable mission rehearsals and precombat checks and inspections (PCCs/PCIs), and often were unprepared to react to additional short-notice mission requirements or changes.

(FOUO) DISCUSSION: Units were challenged in maintaining situational awareness of current route status. As a result, tactical convoys maneuvered on routes in "black" status or in a prolonged tactical haul while forward units engaged the enemy. Units that did not maintain awareness of route status often were engaged by the enemy, resulting in significant mission delays and at times mission failure. Maintaining awareness of ongoing operations and the enemy situation is a critical task for the battalion staff. (ATP 4-01.45, *Multi-Service Tactics, Techniques, and Procedures for Tactical Convoy Operations*)

(U) TECHNIQUES AND PROCEDURES: Battalion staffs must understand the need for subordinate units to execute TLPs and build into their plans sufficient time for subordinate units to conduct TLPs. Leaders must constantly reference TLPs to improve efficiency as they prepare to conduct missions. Units that find a way to parallel-plan with higher to anticipate future requirements mitigate many of the factors and risk that can be attributed to a unit that operates continuously on a short-notice orders process.

(U) ART 1.3.3, Conduct Tactical Convoy

(U) SOURCE: JRTC

(U) Improve OBSERVATION 19 Return to Common Observations

(U) SUBJECT: Integration of movement control nodes

(FOUO) OBSERVATION: Units often are unable to integrate enablers into execution of movement control nodes.

(FOUO) DISCUSSION: Units that establish and conduct their own movement control nodes for departure from the intermediate staging base succeed in controlling movement. Those that have an enabler unit on hand to operate as the movement control node often do not fully integrate with the enabler unit. This causes friction for march units as they prepare for movement because they often have conflicting guidance on movement requirements. This takes organizational energy away from mission preparations such as PCCs, PCIs, and rehearsals as leaders dedicate time to determining their actual requirements for movement.

(U) TECHNIQUES AND PROCEDURES: Having an enabler unit such as a movement control team is a technique for allowing BCTs to maximize their ability to rapidly enter an AO.

Sustainment and operational planners must synchronize their plan with the enabler unit to ensure that everyone understands movement requirements.

(U) ART 1.1.2.4, Participate in Tactical Reception, Staging, Onward Movement, and Integration Activities

(U) SOURCE: JRTC

(U) Improve OBSERVATION 20

(U) SUBJECT: Battalion adjacent unit coordination

(FOUO) OBSERVATION: During more than one rotation, there were major mishaps regarding adjacent unit coordination during both the planning and execution phases of the operation.

(FOUO) DISCUSSION: The scheme of maneuver for both rotations involved a lead battalion tasked with breaching an obstacle and seizing an objective on the far side of that obstacle, trench and wire combination. After successfully conducting the breach, the lead battalion was to conduct a forward passage of lines with a trail battalion, which was templated to push past the breach and far-side security battalion in order to seize the brigade's main objective to the west. During two rotations, the lead battalion did not effectively communicate the location of the actual breach site to the follow-on forces. Additionally, the follow-on battalion did not dispatch its scout elements or any other advanced/forward forces to link up with the lead battalion's breach element in order to confirm the location of the breach site and receive/pass the remainder of the follow-on task force. Instead, the trail battalion remained in a movement versus maneuver posture toward the breach site, which resulted in poor security and caused friendly forces to sit in the open as targets of opportunity for enemy fires if an enemy observer were positioned in the surrounding high ground. Because the follow-on task force missed link-up with the BCT's forward effort, the breach site was approached at a still-intact portion of the obstacle that had not received any amount of obscuration or suppression. While exposed at the obstacle and in canalizing terrain, the task force then had to turn around 180 degrees and retrace its route until the lead elements re-entered the open terrain and were able to shift to the actual location of the breach. This error put the follow-on task force at unnecessary risk of enemy fire at the obstacle and disrupted the BCT's intent of maintaining momentum, which added further stress to the BCT's subordinate unit mission command. The only reason there was not a greater loss of momentum was that the lead or breaching task force was slow to conduct the breach, move through, and seize the BCT's intermediate objective on the far side of the obstacle.

(FOUO) TECHNIQUES AND PROCEDURES: Units must deliberately plan for adjacent unit link-up procedures regardless of their order of movement. The lead element must be prepared to receive follow-on units, and follow-on forces must plan to physically send units to link up with lead elements, especially if obstacles, restrictive terrain, or limited visibility exist in the current situation. All this must be rehearsed prior to execution, ideally before, during, and even after the combined arms rehearsal. Units must avoid moving administratively during operations; "administratively" means not transitioning from movement to maneuver when crossing the line of departure and moving along the prescribed axis toward the objective. Although a unit can generally move faster and have better control of subordinate units when it moves administratively, the unit will often catch up to the lead element, which has already transitioned from movement to maneuver because it is in contact with enemy forces or expects enemy contact to occur soon. The lead element will also slow its maneuver if it is negotiating an obstacle or restrictive terrain. All of this must be considered when synchronizing timelines and creating a

detailed and accurate matrix to help the training unit maintain the commander's intent and a universal shared understanding across all echelons.

(FOUO) In general, follow-on units should maintain constant contact with lead elements to ensure appropriate speed and spacing between the separate units — an area or focus where the BCT command post or tactical command post can assist if it is positioned correctly and maintains a comprehensive tracker of all subordinate units within the AO. This also will allow external adjacent units and internal advanced forces to make adjustments and communicate those adjustments to the remainder of the force as well as allow the information to disseminate throughout every level of the formation. Home station training for larger units should incorporate linear movements as well as moving independently or abreast of each other. Home station training, even with just key leadership, in conducting modified combined arms rehearsals with a prescribed scenario will greatly help with basic understanding as the units plan toward incorporating Soldiers, vehicles, and other elements required to execute the above operations to standard prior to deployment to any CTC.

(U) ART 1.2.7, Link Up with Other Tactical Forces

(U) SOURCE: NTC

(U) Improve OBSERVATION 21

(U) SUBJECT: Brigade support area (BSA) establishment

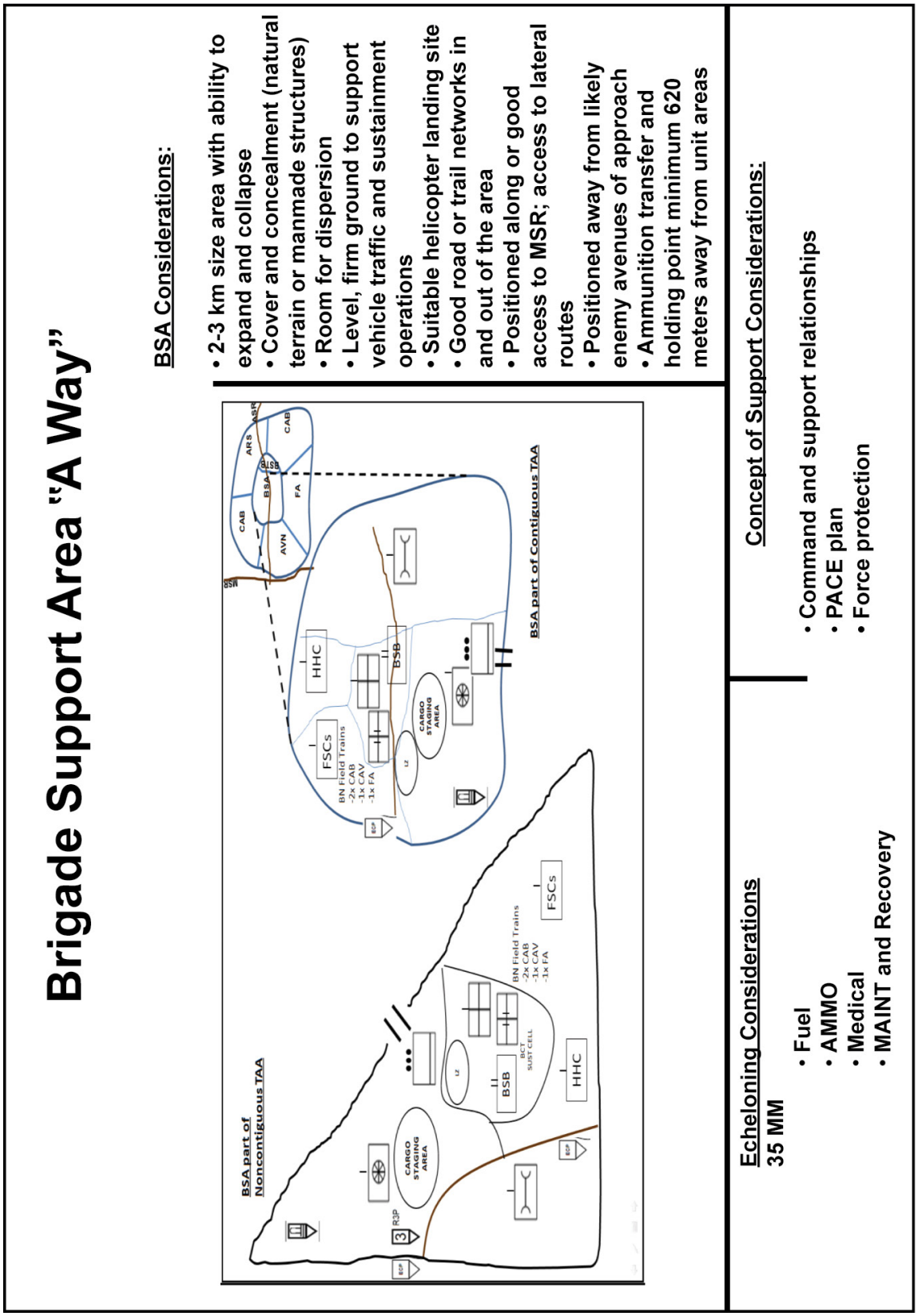
(FOUO) OBSERVATION: Units do not effectively plan for establishment of the BSA.

(FOUO) DISCUSSION: This task is specific to planning the establishment of the BSA. Units struggle to successfully establish a BSA due to multiple factors. First, the quartering party often does not have a clear task and purpose. Without a clear task and purpose, the quartering party generally focuses on establishing a small perimeter for its own operations. If the quartering party has a forward logistical element included with it, the party will also focus on managing that element's resources and supporting the forward element of the BCT. Second, units often do not consider terrain and spatial requirements for the units expected to operate within the BSA. This causes sustainment assets to be clustered together and susceptible to destruction during enemy attacks. Third, the brigade support battalion (BSB), as the unit responsible for the BSA, often does not effectively establish and monitor the requirements placed on tenant and transient units within the BSA. This leads to lapses in security, traffic issues, and safety concerns.

(U) TECHNIQUES AND PROCEDURES: BSBs must establish a clear task and purpose for the BSA quartering party, including the identification of unit and commodity areas within the BSA. Additionally, BSBs must determine security requirements that are flexible and can be adjusted for the arrival or departure of tenant and transient units. (See Figure 4-2, next page)

(U) ART 1.5, Occupy an Area

(U) SOURCE: JRTC



(U) Figure 4-2. Example of how to establish a brigade support area.

Chapter 5

Fires

(U) Sustains

(U) Sustain OBSERVATION 1

(U) SUBJECT: Joint fires

(U) OBSERVATION: Divisions effectively utilized the field artillery intelligence officer (FAIO) in the dynamic targeting process.

(U) DISCUSSION: The FAIO's primary responsibilities include coordinating and synchronizing targeting with the all source collection element chief and the intelligence targeting officer to develop and validate dynamic targets nominated by the all source collection element /all source targeting cell. The FAIO utilized the Joint Automated Deep Operations Coordination System (JADOCS) for passing nominated targets to current operations. The FAIO effectively coordinated with division internal and external intelligence elements to provide input for the development, nomination, and prioritization of targets. Additionally, the FAIO assisted the collection management section in translating targeting working group requirements into guidance for the collection plan.

(U) TECHNIQUES AND PROCEDURES: Utilize Army Techniques Publication (ATP) 3-60, *Targeting*, Pages 3-3 through 3-5, and ATP 3-60.1, *Multi-Service Tactics, Techniques, and Procedures for Dynamic Targeting*, Page 24, to effectively manage FAIO targeting functions.

(U) Army Tactical Task (ART) 3.1.1, Conduct Targeting

(U) SOURCE: Mission Command Training Program (MCTP)

(U) Sustain OBSERVATION 2

(U) SUBJECT: Fire support duties and responsibilities

(U) OBSERVATION: Fires cells and battalion staffs more often are arriving at combat training centers with clearly delineated duties and responsibilities for each member.

(U) DISCUSSION: Units that clearly delineate duties and responsibilities and fully understand the unit's roles and responsibilities will execute operations in a timely fashion with little confusion during high operations tempo. Duties and responsibilities should clearly identify who performs each task and who conducts the inspection or secondary check. This also serves as a checklist to ensure that all required tasks are completed.

(U) TECHNIQUES AND PROCEDURES: Field Manual (FM) 3-09, *Field Artillery Operations and Fire Support,* Chapter 2, clearly identifies the duties and responsibilities of fires cell personnel.

(U) Brigade Fires Cell

(U) "The brigade fires cell plans, coordinates, integrates, synchronizes, and deconflicts the employment and assessment of fires for both current and future operations. The brigade fires

cell is generally organized with a fire support officer and assistants, an air defense airspace management element (ADAM), an electronic warfare element, a targeting element, and digital systems operators. The brigade aviation element typically collocates with the ADAM. The fires cell plans, prepares, coordinates, and integrates the execution and assessment of fires including artillery, mortar, radar, electronic attack, air support, naval surface fire support, and other joint assets." (FM 3-09, para. 2-28)

(U) "The fires cell is the centerpiece of the brigade targeting architecture. The cell plans, synchronizes, coordinates, and integrates fires matched to a wide range of targets/target systems. Along with the brigade S-3 and S-2, the fires cell plans, coordinates, and synchronizes the use of fires with the scheme of maneuver. The fires cell recommends targeting guidance to the commander, develops high-payoff targets, and selects targets for attack. The brigade's targeting working group brings together representatives of all staff sections concerned with targeting. The brigade legal section can assist the fires cell by providing legal review of plans, targeting, and orders. The fires cell coordinates target acquisition, target dissemination, and target engagement functions for the commander." (FM 3-09, para. 2-29)

(U) Primary functions of brigade fires cell, as listed in FM 3-09, include:

- Planning, integrating, coordinating, and synchronizing fire support for brigade operations.
- Providing input to the information collection plan.
- Coordinating the tasking of sensors during development of the information collection plan with the brigade combat team (BCT) S-2, the military intelligence company commander, and the reconnaissance squadron to acquire targets.
- Leading the brigade targeting process.
- Interfacing with all boards/cells.
- Managing and tracking target nominations.
- Producing and executing the fire support plan.
- Briefing the brigade commander on the fire support plan.
- Disseminating the approved fire support plan to subordinate and supporting fire support organizations.
- Preparing the fires portion to include annex D of the brigade operation plan (OPLAN)/ operation order (OPORD).
- Working with the S-7, S-9, public affairs officer, electronic warfare officer, ADAM officer, air liaison officer, and brigade judge advocate to integrate fires and appropriate aspects of inform-and-influence activities into the brigade targeting process.
- Coordinating airspace requirements.
- Recommending and managing fire support and airspace coordination measures.
- Coordinating position areas for fires units with maneuver and airspace control agencies.
- Requesting and coordinating close air support and air interdiction.

- Conducting fires assessment and recommending re-attack.
- Coordinating clearance for attacks against targets (clearance of fires).
- Coordinating requests for additional fire support to include joint fires.

(U) Battalion Fires Cells

(U) "Battalion fires cells provide a fire support coordination capability within the unit headquarters and assist the maneuver battalions and the reconnaissance squadron in executing their respective portions of the BCT's scheme of fires. The fires cells also assist the maneuver battalions, reconnaissance squadron, and brigade special troops battalion in executing their own scheme of fires. Battalion fires cells also provide fire support teams with digital linkage to their battalion mortars as well as to fire support assets available at the BCT or higher levels." (FM 3-09, para. 2-30)

(U) "The battalion fires cell is organized with a fire support officer, fire support noncommissioned officer, an electronic warfare noncommissioned officer, and digital systems operators. The battalion fires cell tracks organic fire support assets (such as mortars), as well as supporting fire support assets. It monitors priority of fire for indirect and electronic attack systems, and recommends priority of search for radars. The battalion fire support officer plans fires in support of all battalion tasks and advises the commander concerning the capabilities, limitations, and effective use of available fire support resources." (FM 3-09, para. 2-31)

(U) ART 3.1, Integrate Fires

(U) SOURCE: Joint Readiness Training Center (JRTC)

(U) Sustain OBSERVATION 3

(U) SUBJECT: Cavalry squadron integration of fires

(U) OBSERVATION: Successful cavalry squadrons consistently and properly use fires assets to destroy the enemy and avoid becoming decisively engaged.

(U) DISCUSSION: After the radio, fires assets are the cavalry's most effective weapon. Squadrons and troops that incorporate the fire support officer (FSO) into their planning are more successful in not becoming decisively engaged and can better shape the overall fight.

(U) TECHNIQUES AND PROCEDURES: The squadron FSO must be integrated into the higher headquarters element's fire support plan. The FSO must be aware of what fires assets are available and when they are available, and plan which types of assets are needed to support the squadron's missions. Training at all levels on how to call for fire and how to communicate with attack weapons teams, scout weapons teams, and fixed-wing aircraft is necessary to use effective fires. Without incorporating the FSO for requesting assets and knowing how to communicate with those assets, the unit cannot be successful in destroying the enemy. The duties and responsibilities of the FSO and fires planning are outlined in FM 3-09.

(U) ART 3.1, Integrate Fires

(U) SOURCE: JRTC

(U) Sustain OBSERVATION 4

(U) SUBJECT: Fire support bottom-up refinement

(U) OBSERVATION: Company fire support teams are generally proactive in bottom-up refinement of targets, assisting higher unit headquarters that are struggling to produce robust fire support plans.

(U) DISCUSSION: Fire support planning includes developing fire plans like target list worksheets and a scheme of fires. It also establishes forward observer control options to ensure that fire support is integrated into the commander's scheme of maneuver and executed in a timely manner. Although fire support planning at brigade and battalion levels often struggles, those shortfalls are somewhat mitigated by the ability of company or platoon fire support teams to refine or submit fire support products. Typically the bottom-up refinement is not shared with the higher headquarters in sufficient time so the refinements are not dispersed across all of the fire support.

(U) TECHNIQUES AND PROCEDURES: Continue to push bottom-up refinement as outlined in FM 3-09, and address a refinement cut-off time in the operations timeline.

(U) ART 3.1.1, Conduct Targeting

(U) SOURCE: JRTC

(U) Sustain OBSERVATION 5

(U) SUBJECT: Incorporating 60mm mortars into company operations

(U) OBSERVATION: Companies do well incorporating their organic 60mm mortars into defensive and offensive operations.

(U) DISCUSSION: For the most part, companies develop indirect-fires plans that include their organic 60mm mortars for all operations. This provides responsive fires during both offensive and defensive operations. Most company fire support officers and mortar section sergeants understand how best to employ the systems and what their capabilities and limitations are.

(U) TECHNIQUES AND PROCEDURES: Companies are most successful when they employ their 60mm mortars in conventional mode when in static positions. They should be employed in handheld, direct lay, or direct alignment method only when part of a formation that is moving and conventional mode is not feasible.

(U) ART 3.2.1, Employ Fires

(U) SOURCE: JRTC

(U) Sustain OBSERVATION 6

(U) SUBJECT: Meeting firing battery occupation time standards

(U) OBSERVATION: Batteries are improving in occupying and placing howitzers in position and ready to fire.

(U) DISCUSSION: As rotations progress, units occupy more rapidly, increasing their firing capability. There is still work to be done on occupation during joint forcible entry. It is clear during rotations which units stress occupation at home station and which do not.

(U) TECHNIQUES AND PROCEDURES: Maintain home station training plans that focus on quick and efficient occupation drills in accordance with ATP 3-09.23, *Field Artillery Cannon Battalion*.

(U) ART 3.2.1.1, Conduct Surface-to-Surface Attack

(U) SOURCE: JRTC

(U) Improves

(U) Improve OBSERVATION 1

(U) Subject: Targeting process

(U) OBSERVATION: The division targeting working group (TWG) was ineffective and did not adequately synchronize targeting efforts across the division area of operations (AO).

(U) DISCUSSION: The TWG was a brief to the deputy fire support coordinator rather than a working group, and did not follow the TWG standard operating procedures (SOP) in the division tactical standard operating procedures (TACSOP). Additionally, the staff and subordinate unit liaison officers (LNOs) were not prepared to provide the detailed analysis needed to adequately synchronize the division's targeting effort. The TWG strayed from its SOP because the group did not brief current operations, staff, or unit-level assessments, nor did it include target or collection refinements for air tasking order cycles 24 to 48 hours out. The division fire support element (FSE) coordinated targeting through constructing and maintaining a prioritized high-payoff target list (HPTL) and a target synchronization matrix, which the FSE produced outside of the TWG using point-to-point interaction with staff members.

(U) TECHNIQUES AND PROCEDURES: Make sure staff members follow the division TACSOP for the TWG. Incorporate assessments, target refinement, and refined collection requirements into the staff and LNO requirements as inputs to the TWG.

(U) ART 3.1, Integrate Fires

(U) SOURCE: MCTP

(U) Improve OBSERVATION 2 Return to Common Observations

(U) SUBJECT: Fire support plan

(U) OBSERVATION: Units need to improve fire support planning.

(U) DISCUSSION: The brigade fire support cell developed a scheme of fires that encompassed the HPTL, target selection standards, attack guidance matrix, target list worksheet, and fire support execution matrix. The fire support cell also provided radar deployment orders to organic Firefinder radars to focus search areas. However, the lack of an observer plan prevented the

brigade from identifying and massing fires on the enemy in depth. The unit continued to rely on unmanned aircraft systems and assets external to the brigade to identify the enemy and observe planned fires.

(U) TECHNIQUES AND PROCEDURES: In addition to the concept of fires and fire support tasks already provided, the brigade should develop an observer plan in support of planned targets. Reliable primary and alternate observers should be identified and tasked to support the planned targets. Designated observer sensor-to-shooter communications links and integrated radar placement and zones are critical to support the scheme of fires. (See FM 3-09, pages 4-1 to 4-5)

(U) ART 3.2, Provide Fire Support

(U) Improve OBSERVATION 3 Return to Common Observations

(U) SUBJECT: Targeting meetings

(U) OBSERVATION: Units are challenged in conducting effective targeting meetings.

(U) DISCUSSION: The brigade struggled to place effects on the enemy in depth, often ceding the initiative to the enemy. The brigade attempted to conduct a daily targeting synchronization meeting to improve the brigade's ability to shape the battlefield. The targeting, intelligence, operations, and fire support officers form the core of the targeting synch meeting. Their lack of emphasis on targeting prevented the brigade from selecting and prioritizing targets and synchronizing efforts. Additionally, combat assessment can provide crucial and timely information to allow analysis of the success of the plan or to initiate revision of the plan. However, assessments routinely do not feed the targeting synch meeting.

(U) TECHNIQUES AND PROCEDURES: The brigade fire support officer and targeting officer should emphasize the importance of the targeting meeting to the brigade commander, deputy commander, executive officer, or brigade S-3 operations officer. The brigade should conduct targeting meetings daily with predetermined staff members to analyze, coordinate, and synchronize the unit's combat power and resources toward finding, tracking, attacking, and assessing high-payoff targets. The purpose of the targeting meeting is to identify key targets to engage and assign the correct delivery system that will achieve the commander's intent. This process often is driven by the air tasking order cycle and must be done well in advance to affect it. The inputs of the targeting meeting include enemy situation and assessment of previously engaged targets, current combat power and forces array, assets available, potential assets to be requested if needed, and any guidance provided by key leaders. The outputs of the targeting meeting should include a fragmentary order or daily tasking order with revised HPTL, attack guidance matrix, target selection standard, target list worksheet, intelligence collection plan, and target synch matrix reference. The targeting portion of the planning SOP document should be updated to reflect this. See ATP 3-60, *Targeting*.

(U) ART 5.1.2, Prepare for Tactical Operations

(U) Improve OBSERVATION 4

(U) SUBJECT: Fires integration and the utilization of the fires cell in aviation battalions

(FOUO) OBSERVATION: Aviation FSEs have been under-utilized as fires integrators.

(FOUO) DISCUSSION: Fire support elements with aviation battalions usually have been tasked as an addition to the operations (S-3) element, assigned to various tasks that rarely have anything to do with fire support. It is essential that aviation FSEs operate just as an FSE for a maneuver battalion while the battalion integrates rotary-wing attack platforms into the maneuver fight. Aviation FSEs are challenged to plan fires as if they were planning fires in support of a maneuver infantry BCT or armored BCT.

(FOUO) TECHNIQUES AND PROCEDURES: In order to continue changing the culture of the aviation FSE toward fire support planning rather than assisting the S-3, there must be emphasis on the value that an FSE adds to the aviation fight. A way to implement this would be to have the aviation task force FSE be the lead in the planning, coordination, and execution of a fires coordination exercise or a joint air attack exercise. This would act as a forcing function to require FSEs to plan fires and take a more active role in the military decisionmaking process (MDMP).

(U) ART 3.1, Integrate Fires

(U) SOURCE: National Training Center (NTC)

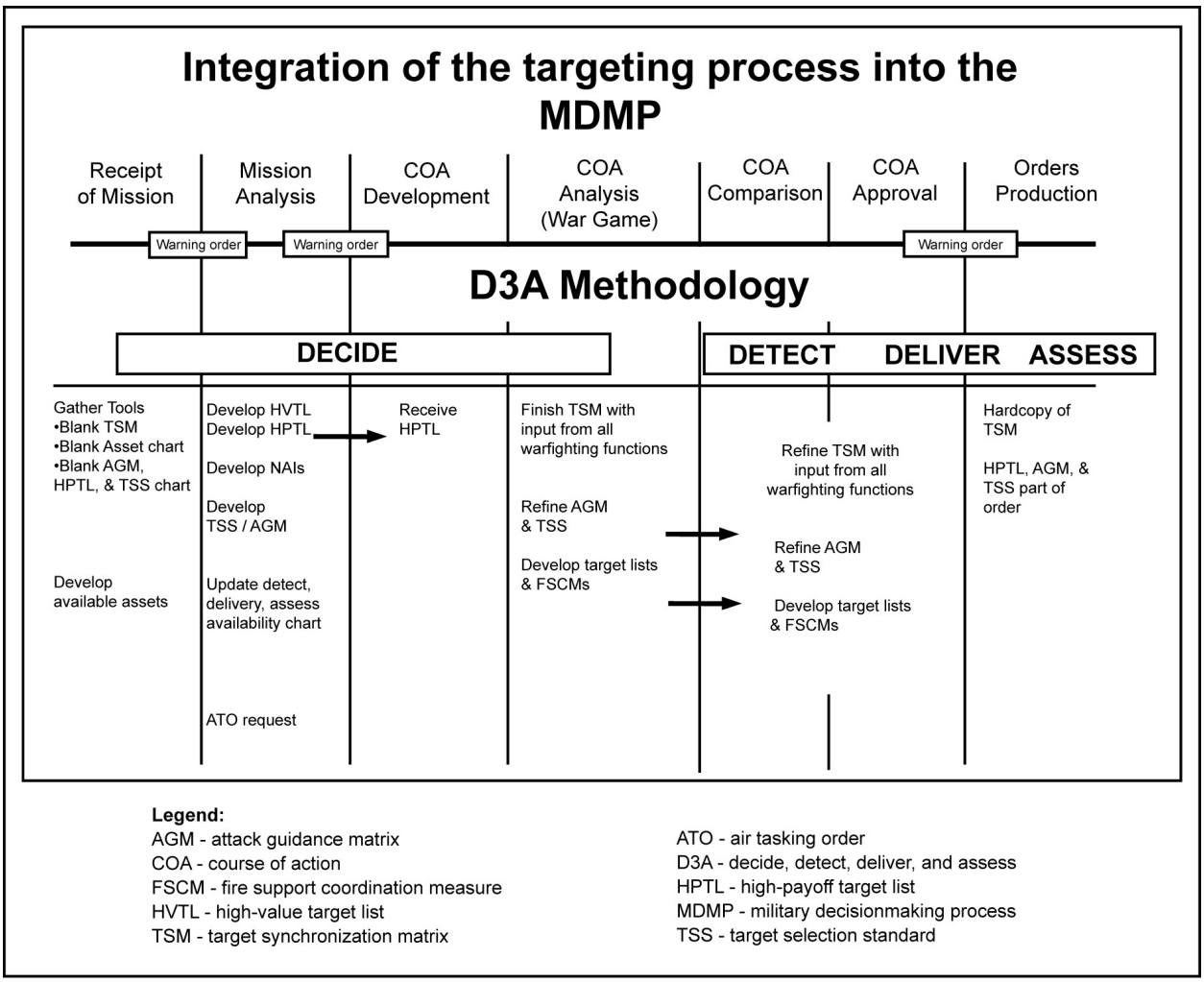
(U) Improve OBSERVATION 5 Return to Common Observations

(U) SUBJECT: Fire support rehearsals

(U) OBSERVATION: Units are challenged in conducting effective fire support rehearsals.

(U) DISCUSSION: Mission success depends as much on fire support preparation as on fire support planning. Fire support rehearsals help staffs, units, and individual fire support personnel to better understand their specific roles in upcoming operations, synchronize execution of the fire support plan, practice complicated tasks before execution, and ensure that equipment and weapons are properly functioning. The unit conducted detailed fire support rehearsals for each planning cycle that grew progressively more efficient over time. During the first battle period, brigade fires failed to rehearse the aviation element's sensor-to-shooter linkage. This was apparent when the combined task force failed to mass fires on a target engaged by aviation assets.

(U) TECHNIQUES AND PROCEDURES: Units must ensure that all primary and alternate observers go through the sensor-to-shooter linkage and rehearse calling for planned targets during the rehearsal. It is also recommended that representation from the S-3 current operations (CUOPS) cell be present to ensure the transition of information and changes from fires planning to fires CUOPS. The unit's TACSOP should include a proposed script for the fire support rehearsal so that all attendees are prepared for execution of the rehearsal. The rehearsal should encompass the enemy situational template, maneuver plan, scheme of fires, fire support triggers, targets in support of the maneuver plan, observer plan, priority of fires, position areas for artillery locations, and any changes to the original plan. It is also recommended that the TACSOP



(U) Figure 5-1. Targeting process and MDMP. (Source: ATP 3-60)

include guidance and a script for the field artillery FM radio technical rehearsal. This rehearsal, at a minimum, must validate the target list worksheet and rehearse the technical call for fire procedures. (See FM 3-09, Chapter 3, Section II)

(U) ART 5.1.2, Prepare for Tactical Operations

(U) Improve OBSERVATION 6 Return to Common Observations

(U) SUBJECT: Targeting and MDMP

(FOUO) OBSERVATION: Brigade combat team fires cells struggle to doctrinally integrate fires and targeting into the BCT fight.

(FOUO) DISCUSSION: This is mostly due to the lack of a fully developed targeting process by the BCT staff. Furthermore, BCTs rarely collaborate and coordinate with the intelligence warfighting function to achieve the synergy required to properly conduct targeting.

(U) “The D3A methodology is an integral part of the MDMP. Targeting begins with the receipt of

(U) Table 5-1. Operations process and targeting relationship. (Source: ADRP 3-09)

Operations Process		D3A	Targeting Task
Continuous Assessment	Planning	Decide	• Perform target value analysis to develop fire support, high-value targets, and critical asset list. • Provide fires running estimates and information/influence to the commander's targeting guidance and desired effects.
			• Designate potential high-payoff targets. • Deconflict and coordinate potential high-payoff targets. • Develop high-payoff target list/defended asset list. • Establish target selection standards and identification matrix (air and missile defense). • Develop attack guidance matrix, fire support, and cyber/electromagnetic activities tasks. • Develop associated measures of performance and measures of effectiveness.
			• Refine high-payoff target list. • Refine target selection standards. • Refine attack guidance matrix and surface-to-air-missile tactical order. • Refine fire support tasks. • Refine associated measures of performance and measures of effectiveness. • Develop the target synchronization matrix. • Draft airspace control means requests.
			• Finalize the high-payoff target list. • Finalize target selection standards. • Finalize the attack guidance matrix. • Finalize the targeting synchronization matrix. • Finalize fire support tasks. • Finalize associated measures of performance and measures of effectiveness. • Submit information requirements to staff and subordinate units.
	Preparation	Detect	• Collect information (surveillance, reconnaissance). • Report and disseminate information. • Update information requirements as they are answered. • Focus sensors, locate, identify, maintain track, and determine time available. • Update the high-payoff target list, attack guidance matrix, targeting synchronization matrix, identification matrix (air and missile defense), and surface-to-air-missile tactical order as necessary. • Update fire support tasks. • Update associated measures of performance and measures of effectiveness. • Target validated, deconfliction and target area clearance resolved, target execution/engagement approval.
	Execution	Deliver	• Order engagement. • Execute fires in accordance with the attack guidance matrix, the targeting synchronization matrix, identification matrix (air and missile defense), and surface-to-air-missile tactical order. • Monitor/manage engagement.
	Assess	Assess	• Assess task accomplishment (as determined by measures of performance). • Assess effects (as determined by measures of effectiveness). • Reporting results. • Reattack/reengagement recommendations.

Legend: D3A – decide, detect, deliver, and assess

the mission and continues through operation order (OPORD) execution and assessment phases. Like MDMP, targeting is a leadership-driven process. As the MDMP is conducted, targeting becomes more focused based on the commander's guidance and intent. [Figure 5-1, Page 82] illustrates the relationship between the D3A methodology and the MDMP along with products generated during targeting." (Army Techniques Publication [ATP] 3-60, *Targeting*, para. 1-21)

(U) TECHNIQUES AND PROCEDURES: First, when implementing a targeting working group to assist in identifying combat assessment requirements, BCT staff should present the assessed current conditions within the operational environment and identify BCT-level points of friction, as well as negative/positive influencers and enemy targets (high-value individuals, improvised explosive devices, indirect-fire systems), followed by a recommended operational approach for the upcoming planning horizon. The TWG then would identify high-payoff targets from the HVTL.

(U) Second, BCT staff should integrate the targeting steps throughout the BCT planning process. ATP 3-60 and Army Doctrine Reference Publication (ADRP) 3-09, *Fires*, depict the required targeting tasks throughout MDMP. The BCT fires cell should ensure that these steps are included within each respective working group. (See Table 5-1, Page 83)

(U) The brigade fires cell should conduct intelligence preparation of the battlefield and targeting academies (respectively) at home station. Synchronizing these integrating processes is critical to execution of the brigade's operations.

(U) ART 3.1.1, Conduct Targeting

(U) SOURCE: JRTC

(U) Improve OBSERVATION 7

(U) SUBJECT: Technical and tactical trigger development for fires

(FOUO) OBSERVATION: Technical and tactical trigger development for fires is not fully understood and applied.

(FOUO) DISCUSSION: Most fire supporters arrive with basic knowledge of simple technical triggers for fires, including accounting for time of flight and transmission time to hit a moving target with indirect fires. Recent trends indicate that forward observers (FOs) are unable to further develop technical triggers that are integrated into and support the maneuver plan. Fire support officers (FSOs) and commanders fail to identify tactical triggers necessary to keep fires synchronized with maneuver. As a result, fires are delivered in a manner sequential to maneuver, not simultaneous with maneuver. All movement stops while fires are employed and then resumes upon completion of fires.

(FOUO) TECHNIQUES AND PROCEDURES: Brigade FSOs must do a better job of planning fires by synchronizing the plan with the commander's intent for fires combined with the fire support coordinator's guidance for fires. FSOs must understand how to develop the decision points (aka tactical triggers) based on the commander's maneuver guidance and fires guidance. FOs must establish technical triggers for specific targets. Finally, units must do a better job of synchronizing all assets during the brigade's fires rehearsal.

(U) ART 3.1.2, Decide Surface Targets

(U) SOURCE: NTC

(U) Improve OBSERVATION 8

(U) SUBJECT: Fire support equipment and target location error

(FOUO) OBSERVATION: Units made excessive target location errors (TLEs) because of untrained observers and lack of knowledge of fire support equipment.

(FOUO) DISCUSSION: Fire support teams arrive at NTC with basic knowledge and understanding of their fire support equipment, specifically items associated with target location. Fire support teams (FISTs) generally understand the basic operation of laser targeting devices, but continue to have TLEs greater than 600 meters. Most of the errors can be attributed to a lack of understanding of the technical capabilities of the laser systems themselves. Soldiers generally do not know the difference between using first laser pulse return or last, the beam divergence, or spread as a function of distance. As a result, target grids obtained from the laser targeting device can be off from 100 meters to 3,000 meters. FISTs report 10-digit grids for targets and then blame the fire delivery asset for the inaccuracy.

(U) Unqualified observers, including infantry and armor officers, noncommissioned officers (NCOs), and Soldiers, commonly call indirect fire for targets of opportunity. These Soldiers unknowingly miss many details and create TLEs in excess of 300 meters.

(U) TECHNIQUES AND PROCEDURES: More training emphasis is needed on FIST knowledge of the capability of assigned equipment. Do not rely on field support representatives for unit expertise.

(U) Train and cross-train qualified observers in garrison at a call for fire trainer or at a gunnery to have accurate target location error within 50 meters. Assign qualified Soldiers to be the primary and alternate observers for fire missions with an intended effect of destroy or neutralize. Targets with an intended effect of suppression should be assigned to unqualified and qualified observers, as appropriate.

(U) ART 3.1.3, Detect Surface Targets

(U) SOURCE: NTC

(U) Improve OBSERVATION 9

(U) SUBJECT: Lack of mortar platoon or section leadership involvement in the fires planning process

(FOUO) OBSERVATION: Units frequently fail to include mortar platoon or section leadership in the planning process for battalion and company fire support.

(FOUO) DISCUSSION: Most maneuver unit leaders and fire support officers lack the tactical knowledge of how to properly employ mortars in combat. Mortar assets are underused or are used incorrectly. The subject matter experts — mortar platoon/section leaders — are left out of the planning process, limiting integration of the mortar platoon. Common misconceptions are that mortars can engage from any part of the battlefield and at any target identified by forward observers. Mortars are best when positioned in defilade and engaging targets from close to mid-range distance from the forward line of troops or troops in contact. This promotes survivability

as well as timely and accurate fires. Mortar rounds cannot destroy heavily armored targets. When mortars are used against such targets, mortar positions are potentially compromised and enemy forces know they have been observed, likely causing them to displace or reposition without the mortars' achieving desired effects. Ammunition resupply issues also need to be addressed in the planning process to ensure that the mortar platoon or section will continuously be able to provide indirect-fire support and meet the commander's intent for fires.

(U) TECHNIQUES AND PROCEDURES: Involve mortar platoon or section leaders and the fire direction chief in the planning process at battalion level. This enables the mortar platoon to understand the commander's intent for fires and provide expertise on capabilities and limitations. Input can help planners determine appropriate missions and targets to be assigned to the mortar platoon or section. Mortar firing points are planned and templated within terrain that makes sense and will provide the best support for both the platoon or section and the supported units. Ammunition resupply is planned for deliberate and emergency resupply to ensure that the mortars will have the ammunition on hand to provide the best effects on targets.

(U) ART 3.2, Provide Fire Support

(U) SOURCE: NTC

(U) Improve OBSERVATION 10

(U) SUBJECT: Field artillery battery precision-guided munition (PGM) capabilities and ammunition management

(FOUO) OBSERVATION: M777 artillery batteries struggle with ammunition management.

(FOUO) DISCUSSION: M777 units arriving at NTC are overwhelmed by ammunition management and special munition fires. Additionally, units are generally unaware that they will face a variety of projectiles and shell-fuze combinations with which they are unfamiliar. M777 units struggle to take advantage of the weapon system capabilities, particularly firing high-explosive, rocket-assisted projectile (HE-RAP); quick smoke; and Excalibur missions. One of the strongest coaching points from observer-coach/trainers (OC/Ts) is to ensure that all howitzers are PGM-capable and that ammunition trackers are updated constantly. Units struggle to track ammunition properly, starting from the initial issue, using Department of the Army (DA) Form 5515. Howitzer sections fail to accurately report ammunition fired or to update records, particularly when reacting to counterfire and conducting survivability moves. However, most units will eventually identify faults, maintain PGM capability, and use ammunition trackers. These processes are normally outlined in the unit TACSOP. Platoon leaders must understand that their involvement with ammunition management helps mitigate problems before reports to the fire direction center. Units commonly add 100 to ammunition counts in the battery computer system when reporting to the battalion fire direction center in order to avoid mission processing errors when piece status in the Advanced Field Artillery Tactical Data System (AFATDS) indicates no ammunition on hand. However, this causes inaccuracies with actual ammunition on hand. Unit SOPs should address how to avoid inaccuracies between actual ammunition on hand, battery computer system-reported data, and AFATDS data.

(U) TECHNIQUES AND PROCEDURES: Units at home station should conduct notional draw of special munitions, using doctrinal references for ammunition management and shell-fuze combinations, on the wide variety of ammunition that can be used, not only actual standard high-explosive, point detonating training ammunition. Training should reinforce lessons from

the combat training centers, using ammunition that is not normally fired. Excalibur rehearsals should be conducted to give howitzer sections and communications sergeants experience on requirements to fire special munitions. This will assist the unit in identifying problem areas and troubleshooting techniques with PGM. It also provides howitzer section chiefs training on ammunition management and the broad capabilities of various ammunition types.

(U) ART 3.2.1.1, Conduct Surface-to-Surface Attack

(U) SOURCE: NTC

(U) Improve OBSERVATION 11 Return to Common Observations

(U) SUBJECT: Survey team survey control points, declination stations, and one-point and two-point positions

(FOUO) OBSERVATION: Field artillery (FA) survey teams without an operational Improved Position and Azimuth Determining System–Global Positioning System (IPADS-G) require frequent initialization stops during operations, causing convoy security concerns. FA battalion survey teams lack guidance and leadership at the battery and battalion levels for coordinating survey efforts to provide support across the battlefield for all firing batteries.

(FOUO) DISCUSSION: The FA survey team is equipped with IPADS-G. This update to the original IPADS allows the survey team to hold initialization (hot status) for longer periods of time, several days, and ensures accuracy for survey control points throughout the battlefield. This makes the process of placing survey control points around the battlefield much easier than with the previous IPADS version and increases efficiency in providing survey support to all units.

(FOUO) There is a lack of coordination at the battalion and battery levels to efficiently move the survey team around the battlefield. In order for the survey team to maximize potential, it must have guidance and leadership provided by each battery. A potential solution is for each firing battery first sergeant to appoint an NCO from within the firing battery to manage survey control point emplacement and move the survey team to the next firing battery. This would continue until all batteries in the battalion have established survey control points. The FA battalion master gunner may assist by providing and supervising execution of battalion survey priority guidance and may even accompany the survey team during operations. Firing batteries and the FA battalion command post (CP) must combine efforts to maximize the survey team's usefulness and efficiency. The most effective location for the survey team is with a firing battery, not the battalion headquarters.

(U) TECHNIQUES AND PROCEDURES: When the IPADS-G is properly connected and all equipment is present at NTC, the user will be much more proficient and able to stay with the firing battery for several days at a time without the need to update the system.

(FOUO) Units should train at home station with the survey team attached to firing batteries and managed by battery leadership, along with a security element for protection. Another effective method is to have the survey team located with the rearm, refuel, resupply, and survey point and to move around the battlefield with resupply convoys to conduct survey operations. The master gunner might find it necessary to stay with the survey team when using this method.

(U) ART 3.2.3, Conduct Survey Operations

(U) SOURCE: NTC

(U) Improve OBSERVATION 12 Return to Common Observations

(U) SUBJECT: Meteorological operations and five requirements for accurate predicted fire

(FOUO) OBSERVATION: Units rarely meet all five requirements when replicating fires. The most common requirement that is not met is using meteorological data. Field artillery battalions struggle with the utilization of the Global Broadcasting System (GBS) for meteorological data.

(FOUO) DISCUSSION: For units that use a profiler, there is no backup for the unit to gain meteorological (MET) data if the profiler breaks. GBS has a number of benefits for the Army, but for the FA battalion, GBS provides important MET data to ensure accurate surface-to-surface fires. Although there are other ways to generate MET data via a Nonsecure Internet Protocol (NIPR) website, the approved method is through GBS. Units arriving at combat training centers (CTCs) often are either untrained on GBS, or the system is unaccounted for by the fire direction center (FDC). Units have not made appropriate satellite requests for GBS in time for staffing and approval. Units that come through CTCs are overwhelmed during the reception, staging, onward movement, and integration (RSOI) days. Many units do not take the time necessary to reconfigure GBS to accurately pull from the correct satellites that are used at CTCs, rather than satellites that are used at home stations. If GBS is not configured correctly during the RSOI phase at CTCs, GBS probably will not work for the duration of the rotation. The FDC is ultimately responsible for obtaining, configuring, and disseminating MET data for the FA battalion and other users throughout the BCT, such as mortars. FDCs are relying on the S-6 for support, but the S-6 does not receive training on GBS or the function of pulling and configuring MET data. Very few FA units are successful at maintaining a properly working GBS and properly trained FDC to perform the functions of receiving and disseminating MET data through GBS.

(U) TECHNIQUES AND PROCEDURES: A good primary, alternate, contingency, and emergency (PACE) plan for MET data must be established at home station before the unit arrives at JRTC. Units also must schedule satellite time with GBS before arriving at JRTC. The Air Force interactive grid analysis and display system is not an approved system for FA fires.

(U) ART 3.2.4, Conduct Meteorological Operations

(U) SOURCE: JRTC, NTC

(U) Improve OBSERVATION 13 Return to Common Observations

(U) SUBJECT: Fire support rehearsals

(FOUO) OBSERVATION: Fires rehearsals, as well as fire support technical rehearsals, often are not completed or become merely enhanced back briefs to the BCT and FA battalion commanders.

(U) DISCUSSION: FM 3-09, *Field Artillery Operations and Fire Support*, para. 3-26, states: "The supported unit headquarters normally conducts the combined arms rehearsal after subordinate units have issued their OPORD. This rehearsal ensures that the subordinate unit's plans are synchronized with those of other units in the organization and that those plans will achieve the intent of the higher commander. A fire support rehearsal, in coordination with the field artillery technical rehearsal, should be conducted prior to the combined arms rehearsal and, if possible, include members of the operations and intelligence staff and other members of the targeting working group."

(FOUO) The brigade fires cell, in conjunction with the brigade operations cell, is responsible for developing the fires rehearsal script and executing the fires rehearsal. The brigade fires cell also takes part in the FA battalion technical rehearsal. The rotational training unit executed fire support rehearsals for the joint forcible entry, defense, and offense operations, but the correct personnel did not attend these rehearsals. Those in attendance did not understand how the brigade fire support plan is synchronized with maneuver and information collection efforts. Rehearsals should provide commanders, leaders, fire support teams, and enablers with a complete understanding of how the plan is to be executed, all the way down to sensor-to-shooter.

(U) TECHNIQUES AND PROCEDURES: The brigade should begin training the execution of rehearsals at the company level. The brigade then can execute a battalion/squadron fire support rehearsal and culminate with a brigade fire support rehearsal. Recommended references include Center for Army Lessons Learned Handbook 13-07, *Fires Rehearsals*; see also JRTC Best Practices for a fire support rehearsal video.

(U) ART 5.1.2, Prepare for Tactical Operations; ART, 5.1.2.2 Perform Rehearsals

(U) SOURCE: JRTC

(U) Improve OBSERVATION 14

(U) SUBJECT: Fires Soldier skills

(FOUO) OBSERVATION: Soldier military occupational specialty (MOS) skills remain critical.

(FOUO) DISCUSSION: Observed deficiencies on the gun line pertaining to MOS 13B30, 13B40, and 13D30 include the following:

- Knowledge of properly recording on DA Form 4513, Record of Missions Fired
- Properly building one-man and two-man firing positions
- Ammunition storage
- Knowledge of how to fill weapons range cards and how to create a defense diagram
- Field artillery battle drills such as hasty occupation and survivability moves
- Knowledge of different howitzer positioning techniques and why they are used
- Fire base operations (build fire base, type of formation for battery or platoon, how to emplace Class IV)
- Manual gunnery (lay by grid, lay with available survey, declinating the aiming circle, lay with M2 compass)
- First sergeant duties and responsibilities
- Reconnaissance, selection, and occupation of position (RSOP)
- Fire commands

(U) TECHNIQUES AND PROCEDURES: ATP 3-09.50, *The Field Artillery Cannon Battery*, addresses most of these basic skills. Home station training is needed to improve these critical skills.

(U) ART 5.1.2, Prepare for Tactical Operations; ART 6.4, Conduct Operational Area Security; ART 6.6 Conduct Survivability Operations

(U) SOURCE: JRTC

(U) Improve OBSERVATION 15

(U) SUBJECT: Counterfire and survivability of mortar platoons and sections

(FOUO) OBSERVATION: Mortar platoons and sections often do not prepare for an intense counterfire threat.

(U) DISCUSSION: Counterfire has the potential to reduce or degrade fire support from friendly mortars. Enemy artillery regiments modeled at JRTC often have organic target acquisition radar, sound ranging, and reconnaissance methods to identify friendly indirect-fire assets. Mortar platoons often do not plan or execute survivability tasks to protect this critical capability.

(U) Mortar platoons should practice survivability techniques in accordance with Army Tactics, Techniques, and Procedures (ATTP) 3-21.90, *Tactical Employment of Mortars*. Normally, mortars are not the first priority for enemy target acquisition systems; however, the mortar platoon leader must assume that the enemy will employ counterfire measures to neutralize friendly mortars. To support the commander's intent for mortar fires, the mortar section must survive the enemy's counterfire efforts. "Survival requires the mortars to avoid detection as long as possible, confuse the enemy as to their true location, and defend themselves against enemy attacks." (ATTP 3-21.90, para. 8-57)

(U) TECHNIQUES AND PROCEDURES: Survivability techniques include:

- **Shoot-and-hide positions**: "Shoot positions are positions from which the mortars fire. Hide positions are located in a covered and concealed area and are occupied by the mortar crews when crews are not firing. The use of shoot-and-hide positions is an effective technique when covered and concealed firing positions are not available or when enemy counterfire is anticipated." (ATTP 3-21.90, para. 8-58)
- **Camouflage**: "Camouflaging a position is accomplished during all stages of construction. Erecting camouflage netting, when available, should be accomplished before beginning construction to conceal the work effort." (ATTP 3-21.90, para. 8-59)
- **Firing lowest charge and elevation**: "Firing the lowest charge and elevation reduces the chance of mortar rounds being detected by radar because of trajectory and time of flight. Also, responsiveness of fires is increased by reducing time of flight. Target effects must be considered since lower trajectories also mean less lethal area coverage." (ATTP 3-21.90, para. 8-60)
- **Frequent displacement**: "Frequent displacement enhances survivability from enemy counterfire but can also degrade the ability of mortars to provide immediate massed fires. To aid continuous fire support, employment and displacement by section and

squad may be needed. The timing and number of moves are critical to survival and should be based on the commander's guidance, the tactical situation, and enemy target acquisition and counterfire threat. Frequent displacement reduces the time available to properly prepare positions and increases crew fatigue." (ATTP 3-21.90, para. 8-61)

- **Adjusting rounds**: Platoons can increase accuracy and reduce adjusting rounds in several ways. All reduce the threat from enemy target acquisition. (ATTP 3-21.90, para. 8-64)

(U) By practicing survivability techniques, the mortar platoon can increase its chances of survival and continue to provide timely and accurate indirect-fire support. Home station mortar training should include survivability techniques.

(U) ART 6.6.1.1, Protect Individuals and Systems; ART 6.6.1.2, Prepare Fighting Positions; ART 6.6.1.3, Prepare Protective Positions

(U) SOURCE: JRTC

(U) Improve OBSERVATION 16

(U) SUBJECT: Multiple launch rocket system (MLRS) battery tactical occupation and dispersion

(FOUO) OBSERVATION: MLRS artillery batteries struggle with tactical occupation and dispersion in decisive action.

(FOUO) DISCUSSION: MLRS units are overwhelmed by the sheer size and depth of terrain afforded for maneuver. Additionally, units are generally unaware that they will face a wide variety of threats such as direct-fire dismounted and mounted engagements, reconnaissance of positions, counterfire, and enemy observed indirect fire. Battery commanders are not aware of doctrinal references to tactical dispersion and are too comfortable with home station firing point occupation. MLRS units struggle to take advantage of terrain within their position areas for artillery. One of the strongest coaching points from observer-coach/trainers is to disperse launchers and conduct survivability moves, from fire point to fire point, after each mission. Units struggle to understand and implement the concept of tactical dispersion. Units that do not effectively disperse are easily attrited by the opposing force through counterfire and reconnaissance-observed indirect fire. Units that do effectively disperse and use terrain for cover and concealment — decreasing the units' visual and radar signature and making the artillery units difficult for the enemy to effectively engage and destroy — mitigate tactical risk of observed fires by the enemy or counterfire on artillery positions.

(U) TECHNIQUES AND PROCEDURES: During home station training, units should conduct occupation of a firing point using doctrinal references for tactical dispersion. Training should reinforce lessons learned, using all elements of the land and available equipment, such as the Raven, to reinforce security. This will assist the unit in both tactical dispersion and developing effective security and defense plans by ensuring interlocking sectors of fire and dead space coverage.

(U) ART 6.6.2, Disperse Tactical Forces

(U) SOURCE: NTC

U) Improve OBSERVATION 17

(U) SUBJECT: Fire support trends

(FOUO) OBSERVATION: Common fire support issues in decisive action include the following:

- The commander's guidance for fires is inadequate or nonexistent.
- Guidance is not published at the battalion or company levels.
- The fires warfighting function is excluded from MDMP. Fires input is not incorporated in the orders process.
- The fires cell lacks a tactical standard operating procedure. The battalion norm is a cut-and-paste from the brigade level.
- Fire support products lack rigor and diligence, or they are nonexistent. There is a lack of understanding regarding the scheme of fires and the fire support execution matrix.
- Observer plans are inadequate, resulting from a lack of rehearsal training. They consistently fail to address line-of-sight differences in terrain (i.e., forest vs. desert).
- Digital (FM) communications are lacking. It is not a priority for the rotational training unit (RTU). This inhibits processing times of organic mortar systems.
- Fire support equipment goes unused. Pocket-size forward entry devices and lightweight laser designator range finders are not used due to lack of knowledge or will.
- The RTU does not bring all necessary equipment to JRTC.
- Fires support teams (FISTs) are not fulfilling their primary duties because they too often are tasked as drivers and company intelligence support team personnel. Company commanders appear to place fires at a low priority.

(U) TECHNIQUES AND PROCEDURES: Home station training must address these critical skills.

(U) ART 5.1.2, Prepare for Tactical Operations

(U) SOURCE: JRTC

Chapter 6

Protection

(U) Sustains

(U) Sustain OBSERVATION 1

(U) SUBJECT: Detention operations during a decisive action operation **Return to Common Observations**

(FOUO) OBSERVATION: Military police combat support companies are conducting successful detention operations in support of brigade combat teams during decisive action operations at the National Training Center (NTC).

(FOUO) DISCUSSION: Military police units and the brigade provost marshal have identified and thoroughly implemented doctrine found in Field Manual (FM) 3-63, *Detainee Operations*. By having a shared understanding of the detention process from point of capture through final processing, the brigade has the ability to garner critical time-sensitive information utilizing human collection teams after initial screening at the detainee collection point manned by trained military police officers, noncommissioned officers, and Soldiers in a rapid manner. By having a deliberate, clearly defined plan at the brigade level, units are able to efficiently transport detainees off the battlefield without placing a significant burden on maneuver forces.

(FOUO) TECHNIQUES AND PROCEDURES: Incorporate home station unit training in accordance with FM 3-63 at the platoon and squad levels. By developing leaders and utilizing doctrine, the unit will be well-prepared to execute detention operations at echelon. Targeted specific training on the detainee flow process greatly enhances the unit's rotational success at NTC. Well-rehearsed, well-versed leaders are key to detainee operations.

(U) **ANALYST NOTE**: This observation is based on multiple occurrences of successful detainee operations at NTC. Observer-coach/trainers (OC/Ts) at the Joint Readiness Training Center have observed multiple units that needed to improve detainee operations. Both observations are included in this report.

(U) Reference: Army Tactical Task (ART) 6.12, Conduct Detention Operations

(U) SOURCE: NTC

(U) Sustain OBSERVATION 2 Return to Common Observations

(U) SUBJECT: Explosive ordnance disposal (EOD) support to route clearance teams

(FOUO) OBSERVATION: EOD companies provide one to two EOD teams with route clearance patrols (RCPs) during task force operations lane training and decisive action training environments.

(FOUO) DISCUSSION: EOD companies consistently have been attaching EOD teams with the RCPs. This allows for a greater understanding of both EOD capabilities and the capabilities of the engineer route clearance teams. RCPs with these capabilities can be and have been utilized as security movements during the decisive action training environment (DATE) and have limited

the emplacement of improvised explosive devices (IEDs) along main supply routes, allowing freedom of movement for logistical support elements.

(FOUO) TECHNIQUES AND PROCEDURES: EOD companies should continue to attach EOD teams to route clearance patrols to gain an overall understanding of the capabilities of the counter-IED (C-IED) fight and allow freedom of movement for logistical sustainment.

(U) ART 1.6.1.2.2, Conduct Route Clearance

(U) SOURCE: NTC

(U) Improves

(U) Improve OBSERVATION 1

(U) SUBJECT: Area and base security

(FOUO) OBSERVATION: Units are challenged with base-cluster defense in a DATE by treating the mission as a forward operating base (FOB) security task rather than incorporating area security operations.

(FOUO) DISCUSSION: Most often, this mission is tasked to the brigade special troops battalion to allow the maneuver task forces to further expand the lodgment or conduct a deliberate attack. When conducting intelligence preparation of the battlefield (IPB) for the rear area security mission, the unit must consider security of key terrain and avenues of approach surrounding the area extending to a range beyond that of enemy artillery, rockets, and mortars, as well as control of the airspace.

(U) During planning for the rear area security mission, synchronize the following:

- Fires for suppression and smoke to support reconnaissance and protect critical friendly zones
- Engineer support for mobility, countermobility, and survivability tasks
- Air defense support to cover vulnerable areas
- Protection of civil and/or military personnel, facilities, installations, and key terrain in the IPB plan
- Link-up procedures and conditions for employment, if provided with a reserve

(FOUO) Units struggle with employing protective obstacles as part of the rear area security mission. When planning obstacles, units often fail to identify mobility requirements such as patrols, counterattack or reaction forces, and logistic support traffic needing to enter or depart a position.

(FOUO) Units often fail to coordinate obstacle locations with adjacent units and record and report obstacle locations using either a minefield record and/or Army Battle Command System (ABCS) overlays. Units do not place protective obstacles outside of hand grenade range and ensure integration with the final protective fires.

(U) TECHNIQUES AND PROCEDURES: In a DATE, units must incorporate area security operations into base-cluster defense (see Task 07-6-1272, Conduct Area Security [Battalion–Brigade], on the Army Training Network):

- Consider control of land and air space to be secured out to the range of enemy indirect fire.
- Integrate and synchronize fires, engineer support, and air defense.
- Protect civil and military personnel, facilities, and key terrain.
- Define land-use procedures and employment conditions for the reserve.

(U) When employing protective obstacles (Task 07-2-1396, Employ Obstacles [Platoon–Company]), units must perform the following:

- Leave lanes/gaps to allow mobility requirements.
- Record and report using Department of the Army (DA) Form 1355, Minefield Record, and ABCS overlays.
- Integrate with final protective fires.

(U) ART 6.4.1 Conduct Area and Base Security Operations

(U) SOURCE: JRTC

(U) Improve OBSERVATION 2

(U) SUBJECT: Counter-improvised explosive device (C-IED) working group

(FOUO) OBSERVATION: During DATE rotations, rotational training units have not consistently held brigade-level C-IED working groups.

(FOUO) DISCUSSION: Outputs from the C-IED working group should feed the targeting process with consolidated analysis and feed recommendations to targeting. The working group should disseminate C-IED information so it can be pushed out to the force. The working group supports the C-IED lines of operation (LOO): defeat the device, attack the network, and train the force. Without a C-IED working group, there is a lack of synchronization of C-IED efforts across the brigade. Critical C-IED equipment; tactics, techniques, and procedures (TTPs); and issues, concerns, and recommendations to support the train the force LOO are much more difficult to identify and disseminate without the working group. The C-IED working group also is important in identifying and leveraging intelligence, surveillance, and reconnaissance (ISR) assets to execute trend/pattern analysis and interdict IED emplacement. Even when the brigade is concentrating staff resources on offensive planning efforts during a DATE rotation, the C-IED working group is still a crucial part of the overall fight and can assist greatly in properly targeting high-value individuals and targets. At a minimum, one of the C-IED working group outputs can be guidance to assist with force protection and vulnerability assessments in areas that have a higher IED threat than others. For example, one area may be concentrating on offense/enemy conventional weapons threat while another area may have a higher threat of IEDs and could benefit from synchronized C-IED force protection analysis.

(U) TECHNIQUES AND PROCEDURES: Units should develop a C-IED working group at or prior to the leaders training program. The working group should be part of the brigade targeting cycle battle rhythm. The unit should develop a list of C-IED working group inputs/outputs.

(U) ART 6.11.1, Direct Explosive Ordnance Disposal Operations

(U) SOURCE: JRTC

(U) Improve OBSERVATION 3

(U) SUBJECT: Location of the brigade detainee collection point during a DATE rotation

(FOUO) OBSERVATION: During four rotations, the brigade detainee collection point (DCP) has been located at various tactical assembly areas throughout the brigade's area of operations.

(FOUO) DISCUSSION: Poor placement of the DCP can impede the detainee flow process, resulting in a lack of timely human intelligence (HUMINT) interrogations. This significantly degrades intelligence analysis at the brigade level for time-sensitive targeting. Often, the brigade chooses to place the DCP either at the brigade tactical assembly area (TAA) or at the brigade engineer battalion (BEB) TAA, as the BEB TAA is in close proximity to the brigade provost marshal. Often these locations are not located on a main line of communication, which, when utilizing infantry doctrine regarding detainee movement, impedes the sustainment lines of communication.

(FOUO) TECHNIQUES AND PROCEDURES: The ideal location for the brigade DCP, by doctrine, is the brigade support area (FM 3-63). This reinforces infantry doctrine regarding detainee movement and significantly frees up combat power by utilizing the field trains command post/combat trains command post methodology to move detainees in an expedited manner across the battlefield on main lines of communication. (See FM 3-21.8, *Infantry Rife and Mechanized Platoon Collective Task Publication*) While the DCP and provost marshal will not be collocated, the military police company conducting detention operations will have an officer in charge at the location capable of fielding any questions that the provost marshal may have regarding detainees and HUMINT operations.

(U) SOURCE: NTC

(U) Improve OBSERVATION 4

(U) SUBJECT: Use of the lane marking system

(FOUO) OBSERVATION: The limited visibility of the marking poles and lack of penetrating power of the lane marking system do not allow engineers to expeditiously project combat power through an obstacle.

(FOUO) DISCUSSION: Units use the lane marking system to mark the initial lane into the obstacle to allow maneuver battalions to project combat power through the obstacle. The lane marking system does not possess the necessary power to project the hand-emplaced minefield marking set poles into the subsurface, and the poles are falling to the ground. As a result, sappers get out and manually emplace the poles into the subsurface to ensure marking for the left handrail through the obstacle. This prevents follow-on forces from driving into the obstacle.

Secondly, if the poles do penetrate surface and remain in position, they are difficult for vehicle drivers to see when they are "buttoned up." The poles do not stand high enough from the ground to be identified during low visibility (dust, darkness, etc.).

(FOUO) TECHNIQUES AND PROCEDURES: A thorough terrain analysis must be conducted before the engineer unit decides to use the lane marking system as the primary marking standard. The lane marking system should be used as an emergency marking asset. Units are successful marking a lane through the obstacle with traffic cones and VS-17 panels.

(U) ART 1.6.1, Overcome Barriers, Obstacles, and Mines

(U) SOURCE: NTC

(U) Improve OBSERVATION 5

(U) SUBJECT: Integration of dismounted and mounted route clearance

(FOUO) OBSERVATION: Route clearance patrols are not deploying dismounts to clear vulnerable points along their routes. As an alternative to deploying dismounts with handheld detection equipment, units are relying on the Husky as the sole means to clear the vulnerable point. Using the Husky as the only clearing method causes units to miss IEDs or enemy personnel hiding in a position of advantage.

(FOUO) DISCUSSION: This observation is tied to two friction points that the route clearance patrols are facing: personnel and culture. The modified table of organization and equipment (MTOE) for the route clearance platoon is not large enough to support dismounts during operations. In addition, most units come with Soldiers who have conducted only mounted route clearance and are reluctant to deploy dismounts on the ground unless it is an emergency.

(U) TECHNIQUES AND PROCEDURES: Mounted and dismounted route clearance provides a capability to the brigade's fight in the rear that will make it difficult for the enemy to adapt.

(U) ART 1.6.1, Overcome Barriers, Obstacles, and Mines

(U) SOURCE: NTC

(U) Improve OBSERVATION 6

(U) SUBJECT: Obstacle reporting and recording

(U) OBSERVATION: Units must include obstacle/lane graphics as part of the common operational picture (COP).

(U) DISCUSSION: The complexities of the various military communications, such as frequency modulated radio, joint capabilities release, and Command Post of the Future, along with lack of compliance with tactical standard operating procedures (TACSOP), make it difficult to portray an accurate COP accessible to all subordinate units. The effects of these challenges include inability to envision the unit's entire engineer effort, poor reporting, and difficulties in collecting and analyzing enemy obstacle intelligence.

(U) TECHNIQUES AND PROCEDURES: The brigade should develop solutions in conjunction with S-2 and S-3 current operations sections that allow engineer-related graphics to be accessed via digital and analog products. Enforce TACSOP reporting formats for all echelons. Solutions must be crafted with full consideration as to how to share with multinational and subordinate units.

(U) ART 5.2.1, Conduct Command Post Operations to Support Tactical Operations

(U) SOURCE: NTC

(U) Improve OBSERVATION 7

(U) SUBJECT: Continuity checks on mine clearing line charge (MICLIC) trailers and assault breacher vehicles (ABVs)

(FOUO) OBSERVATION: Engineer platoons frequently lack the skills to conduct a continuity check on MICLIC trailers or ABVs.

(FOUO) DISCUSSION: Continuity checks are located in the technical manuals (TMs) for each platform that fires a MICLIC. Engineer platoons often do not possess the knowledge or training to conduct continuity checks for their MICLIC systems. Engineer platoons must conduct training on their MICLIC systems prior to arriving to NTC. Continuity checks have become an additional training event during reception, staging, onward movement, and integration, facilitated by OC/Ts.

(U) TECHNIQUES AND PROCEDURES: Successful engineer units have personnel who have worked with their assigned equipment and have shared the institutional and practical knowledge with their operators. These Soldiers are aware of the TMs and have practiced continuity checks prior to arrival at NTC. A few units have had Soldiers who attended the B6 course (Combat Engineer Heavy Track Course) at Fort Leonard Wood, MO, prior to arriving at NTC. Emphasize this task during home station training.

(U) ART 5.1.2, Prepare for Tactical Operations

(U) SOURCE: NTC

(U) Improve OBSERVATION 8

(U) SUBJECT: Chemical, biological, radiological, nuclear, and high-yield explosives (CBRNE)

(FOUO) OBSERVATION: Many units are not prepared to react to or operate in a CBRNE environment when they deploy to NTC.

(FOUO) DISCUSSION: Units often do not bring all of their CBRNE defense MTOE equipment and often have not completed annual CBRNE skill level 1-4 training prior to their rotation. Units frequently do not plan or exercise CBRNE defensive operations during their Road to War preparation activities. CBRNE protection is often overlooked when a force protection plan is established.

(U) TECHNIQUES AND PROCEDURES: CBRNE individual and unit training should be conducted annually and also must be a part of the predeployment tasks and training. Units

should order chemical defense equipment to fill shortages months in advance and ensure that every Soldier assigned has the correct, properly sized personal protective equipment. Ensure that all CBRNE defense equipment is operational and has all of its components. Develop a plan for CBRNE defense for the task force, and incorporate it into the force protection plan. Identify and train CBRNE reconnaissance teams. Develop a plan and train for patient decontamination with the medical platoon. Ensure that all Soldiers understand the CBRNE threat and why we train. Coordinate and have a good working relationship with the brigade combat team CBRNE cell prior to deployment to a combat training center. Emphasize this task during home station training.

(U) ART 5.1.2, Prepare for Tactical Operations

(U) SOURCE: NTC

(U) Improve OBSERVATION 9

(U) SUBJECT: Tactical assembly area force protection

(FOUO) OBSERVATION: Aviation TAA security often lacks sufficient force protection measures due to lack of organic crew-served weapons, lack of qualified gunners, and limited application of security measures by battalion task forces.

(FOUO) DISCUSSION: Issues such as weapons shortages and qualifying gunners on crew-served weapons can and should be addressed at home station. Units should apply all measures available while at NTC through intelligence preparation of the battlefield, developing and implementing a security plan, and rehearsals.

(U) TECHNIQUES AND PROCEDURES: During home station training, stress the importance of security planning within the aviation task force, using organic assets. Security planning starts with the first warning order during the military decisionmaking process. The security plan must be understood by all subordinate units within the aviation task force. If possible, the plan can incorporate additional security elements, if assigned by higher headquarters, but additional security forces should not be depended upon. Assign all elements sectors of responsibility, and clearly identify what assets each unit has for defense and what will be needed to defend the TAA from a large enemy threat. Units should train on basic Soldier skills, such as creating a sector sketch and conducting terrain analysis for possible avenues of approach. Unit leaders should also practice tying into and establishing interlocking but independent perimeter defense measures with adjacent units, and integrating available fires to defend against Level I threats and at least impede Level II attacks until assistance arrives. The security plan should minimize disruption to the unit's operations. Other implied tasks include training Soldiers on weapons systems, training on how to build defensive fighting positions, and rehearsing and drilling the defensive plan. These will greatly increase the unit's effectiveness at perimeter security. Having a plan in place that is understood by all, is coordinated, practiced, and rehearsed, and is executed with violence can preserve the force until assistance can arrive.

(U) ART 5.1.2, Prepare for Tactical Operations

(U) SOURCE: NTC

(U) Improve OBSERVATION 10 Return to Common Observations

(U) SUBJECT: Preparation of fighting positions

(FOUO) OBSERVATION: The construction of proper fighting positions appears to be a dying art, as coaching has often been required to bring units up to standard on this basic Soldier task.

(FOUO) DISCUSSION: The preparation of fighting positions remains a basic and critical task for a platoon in the defense, yet many platoons do not display proficiency in this task. When asked why fighting positions are not being constructed to standard, a common answer is that the Soldier's/leader's previous deployment experience demonstrated that the need to "dig in" was something that never happened.

(FOUO) This assumption is not unique to any specific formation. When coached, the vast majority of leaders are receptive to the basic doctrinal principles behind the correct construction of fighting positions.

(U) TECHNIQUES AND PROCEDURES: Emphasis on this basic task should begin at home station, with doctrinal guidance or leader professional development being devoted to the importance of, and correct construction of, fighting positions.

(U) ART 6.6.1.2, Prepare Fighting Positions

Chapter 7

Sustainment

(U) Sustains

(U) Sustain OBSERVATION 1

(U) SUBJECT: Establishing a casualty collection point (CCP)

(U) OBSERVATION: Companies and platoons have demonstrated proficiency in establishing a CCP and disseminating its location.

(U) DISCUSSION: The roles and responsibilities of establishing the CCP generally are part of the company standard operating procedure (SOP). Pre-designated aid and litter teams hand off causalities from the platoon CCP to the company CCP when conditions allow. Locations of ambulance exchange points (AXPs) and helicopter landing zones (HLZs) are shared both vertically and horizontally prior to the mission to allow for shared understanding in reference to CCP and medical evacuation (MEDEVAC) operations. CCP rehearsals generally occur while units are at the intermediate staging base (ISB), which produces further refinement to the SOP.

(U) Unit plans are tested during small-scale operations, which provide feedback and refinement to the unit's SOPs. Unfortunately at the Joint Readiness Training Center (JRTC), due to time constraints and training priorities, the pace of operations usually does not allow the medical exercise to continue after major operations long enough for causalities from the company CCP to be evacuated further to the battalion forward aid station (FAS). This inhibits the ability to test the systems for a mass casualty event.

(U) TECHNIQUES AND PROCEDURES: Further performance measures and steps for conducting CCP operations can be found under Task 081-833-0152, Establish a Casualty Collection Point, on the Army Training Network.

(U) Army Tactical Task (ART) 4.3.2, Provide Medical Evacuation (Air and Ground)

(U) SOURCE: JRTC

(U) Sustain OBSERVATION 2

(U) SUBJECT: Mission tracking and patient documentation

(U) OBSERVATION: MEDEVAC platoons have improved patient documentation and patient tracking during mission readiness exercises and decisive action training environment (DATE) rotations.

(U) DISCUSSION: This improvement in patient documentation has greatly improved continuity of care. Additionally, JRTC has seen mission trackers improve in depth, which has allowed forward support medical platoons (FSMPs) to analyze medical trends.

(U) FSMPs rotating through JRTC have displayed an increased proficiency regarding patient documentation that exceeds the standards of Army Regulation (AR) 40-66, Medical Record

Administration and Healthcare Documentation. Flight medics are completing Department of Defense (DD) Form 1380, Tactical Combat Casualty Care, and DA Form 7656, Tactical Combat Casualty Care, at point-of-injury missions and intra-facility transfers (Role 1 to Role 2 and Role 2 to Role 3). The flight medic is updating and providing the forms to the receiving facility along with a thorough patient report to the receiving medical provider.

(U) Once the MEDEVAC crew has reset from its mission, the flight medic is completing the DA Form 4700, Patient Care Report, in both analog and digital formats. This report is then reviewed for quality control by the medical training noncommissioned officer (NCO) and the task force flight surgeon. Upon completion of the patient care report, the FSMP operations NCO is filing it with other pertinent mission data and updating the mission tracker with battle roster numbers, Class VIII used, and mission timeline.

(U) TECHNIQUES AND PROCEDURES: With the advanced skill of the critical care flight paramedics, it is important to expand on the required documentation for patients. DD Form 1380 and DA Form 7656 are excellent tools to be used by air ambulance companies that live by the launch-recover-launch mentality. After completion of each mission, a standard Army-wide patient care report should be generated and included with the patient's record in order to provide continuity of care and a clear picture of events and treatment from the point of injury through all phases of medical evacuation.

(U) ART 4.3.2., Provide Medical Evacuation (Air and Ground)

(U) SOURCE: JRTC

(U) Sustain OBSERVATION 3

(U) SUBJECT: Mission focus

(FOUO) OBSERVATION: MEDEVAC units were rarely utilized during force-on-force, but did an excellent job focusing on meeting the "golden hour" requirement whenever they received a 9-line request.

(FOUO) DISCUSSION: Most units' self-imposed 15-minute launch criterion was rarely met due to the task force command post's lack of understanding of the mission and launch approval authority process. Most of the main command posts (CPs) lacked a clear MEDEVAC 9-line battle drill, but the MEDEVAC CP functioned appropriately for the most part. This is where we began to coach toward sending some form of liaison to either brigade or the main CP to facilitate a better understanding with the staff in the task force CP.

(U) TECHNIQUES AND PROCEDURES: The following are recommended:

- Continue to enforce the mindset "train as we fight." Realizing how critical the MEDEVAC mission is, it is imperative that the MEDEVAC unit as well as the main CP clearly understand the importance of receiving proper intelligence briefings prior to launching. Although meeting the wheels-up time plays a crucial role in providing life-saving measures to critically injured patients, crew safety must always weigh heavily on the crews and staffs prior to launching.
- Ensure that the senior 67J and the FSMP platoon sergeant persistently educate and coach the task force commander, battalion main CP, and brigade medical operations on MEDEVAC operations.

- Provide MEDEVAC crews with the current medical common operational picture to allow MEDEVAC crews to understand where the medical assets are located across the battlespace. The FSMP leader must participate in all levels of planning while maintaining situational awareness of the battlefield. This ensures that medical planning is integrated into the mission, instead of being reactive to the mission. The FSMP leader provides real-time information to his aircrews as he tracks the battle with other staff members. The aircrews receive thorough briefings for pre- and post-flight. The FSMP leader effectively coordinates deviations to the plan and makes adjustments as necessary.

- If the unit can provide a MEDEVAC liaison officer (LNO) to facilitate continuous staff interaction, the FSMP leader can be freed up to lead his section. Understand how to employ an FSMP effectively, and coordinate a comprehensive coverage plan based on events on the battlefield that preserves the fighting strength of the brigade combat team. The FSMP did very well in staying mission-focused by continuously coaching and teaching the main CP staff on MEDEVAC operations. For the most part, the main CP was receptive and willing to ensure that MEDEVAC operations did not fail. The main CP must realize that although the FSMP can function as its own entity, it is not, and relies heavily on the main CP for situational awareness in the battlespace, threats, weather, scout weapons team/attack weapons team support, mission/launch approval, etc.

(U) ART 4.3.2, Provide Medical Evacuation (Air and Ground)

(U) SOURCE: National Training Center (NTC)

(U) Sustain OBSERVATION 4

(U) SUBJECT: Air mobility operations

(U) OBSERVATION: The G-4, division transportation officer, and division surgeon successfully integrated the division-assigned air mobility LNO into their sustainment operations.

(U) DISCUSSION: Using fixed-wing assets reduces the congestion of ground lines of communication and increases availability of rotary-wing assets. By including the air mobility LNO into its daily battle rhythm, the division was able to conduct air land delivery and air drop operations, which allowed the division to rapidly move troops and cargo throughout the area of operations and air-evacuate hundreds of wounded Soldiers from Role 2 to Role 3. The division also expedited the repositioning of its tactical command post (TAC) using fixed-wing assets.

(U) TECHNIQUES AND PROCEDURES: Ensure that the division staff understands the capabilities the air mobility LNO can bring to support operations, and integrate those capabilities into all aspects of division planning and execution. (Reference: Army Doctrine Reference Publication 4-0, *Sustainment*, para. 2-1)

(U) ART 4.1.4.2, Provide Aerial Delivery Support

(U) SOURCE: Mission Command Training Program

(U) Sustain OBSERVATION 5

(U) SUBJECT: Execution of downed aircraft recovery team (DART) training

(U) OBSERVATION: Home station training in accordance with doctrine enables units to succeed in DART operations.

(U) DISCUSSION: DART mission success requires rehearsals; a good primary, alternate, contingency, and emergency (PACE) communications plan; initial aircraft assessment; employment of the universal maintenance aerial recovery kit (UMARK); and troop leading procedures (TLPs) to facilitate bottom-up refinement leading up to execution. The importance of doctrine-based training to facilitate a successful execution is paramount.

(U) According to Field Manual (FM) 3-04.513, *Aircraft Recovery Operations*, commanders of aviation maintenance or support companies/troops are required to conduct nondestructive peacetime battle damage assessment and repair (BDAR) training that simulates combat conditions as closely as possible. "Soldiers must become familiar with BDAR repair kit components. Each maintainer should know how to perform battle damage assessment for assigned MDS [mission design series] and MOS [military occupational specialty] skill sets." (FM 3-04.513, para. 2-37). Shared understanding of the basic scheme of DART operations by senior staff, battle captains and battle NCOs, company commanders, security forces, and the DART is the linchpin of mission success.

(U) "Training is essential to successful completion of the DART operation. UMARK familiarity reduces the time required to complete a DART operation. Training should be conducted utilizing every available opportunity. Garrison recoveries may be enhanced by simulating combat conditions with safety measures applied. Simulated conditions are as follows: Performing security operations; placing time constraints on rigging procedures to simulate enemy threat; CBRN [chemical, biological, radiological, and nuclear] simulations using mission-oriented protective posture (MOPP); [and] route planning with simulated threat." (FM 3-04.513, para. 2-39).

(U) A well-disciplined aviation task force goes to JRTC with a combination of tactical standing operating procedures (TACSOPs), battle drills, and various execution checklists for DART operations. Nearly every aviation maintenance company or troop arriving at JRTC understands the importance of the DART mission and sets it as a top training priority during the unit's deployment. Because the utilization and training of the UMARK kit is too often overlooked in garrison, maintenance companies are taking advantage of the vast opportunities at JRTC to utilize the kit and train their personnel accordingly.

(U) TECHNIQUES AND PROCEDURES: FM 3-04.513 addresses several avenues to create realistic DART and BDAR training and rehearsals to ensure that units maximize their capabilities.

(U) ART 4.1.1.3.2, Conduct Dedicated Recovery Operations

(U) SOURCE: JRTC

(U) Sustain OBSERVATION 6

(U) SUBJECT: Robust field trains command post operations

(FOUO) OBSERVATION: Squadrons that emphasize logistical planning and field trains command post operations improve their logistical efforts.

(FOUO) DISCUSSION: The distribution company within the brigade support battalion (BSB) operates from within the brigade support area (BSA) as a static control and coordination node. The location of the BSA in the rear area, coupled with the width of and distance to the squadron's front line trace, causes a significant movement requirement for the forward support troop to reach the squadron's logistics release point (LRP) site. Additionally, communications between the field trains command post and combat trains command post are usually relegated to Blue Force Tracking only due to the distances between these two logistical nodes.

(U) TECHNIQUES AND PROCEDURES: The squadron and, in particular, the forward support troop routinely do a remarkable job of echeloning their logistical assets within the field trains command post and combat trains command post in order to provide continuous logistical support to the squadron. Again, the costs of these decisions are typically manifest in protracted transit times from the field trains command post to the squadron LRP site and limited communications platform employment. It is recommended that units focus sustainment training on planning and execution of timely, synchronized logistics release points and service station or tailgate resupply, as extended station times can potentially derail future logistical operations.

(U) ART 5.1.1, Plan Operations

(U) SOURCE: NTC

(U) Improves

(U) Improve OBSERVATION 1 Return to Common Observations

(U) SUBJECT: Sustainment planning

(FOUO) OBSERVATION: Brigade combat teams (BCTs) often fail to conduct detailed sustainment planning.

(FOUO) DISCUSSION: BCT staffs routinely fail to execute in-depth sustainment planning critical to logistical support requirements. BCT staffs also often fail to conduct sustainment preparation and execution during operations.

(U) Detailed comprehensive sustainment planning is essential to maintaining combat power, enabling strategic and operational reach, and providing the BCT with endurance. Collaborative and parallel planning between the brigade S-4 and BSB support operations officer (SPO) is essential to ensure that they build and maintain a shared understanding. They must continue to clearly define their roles, functions, and responsibilities, and better integrate into the brigade's planning processes. Additionally, it is imperative that the sustainment warfighting function better leverage its digital systems because they are the gateway for the sustainment WfF to transition from situational awareness to situational understanding, resulting in improved visibility throughout the operational environment (OE).

(U) Detailed sustainment planning begins with thorough in-depth preparation of the OE. "Sustainment preparation of the operational environment is the analysis to determine infrastructure, physical environment, and resources in the operational environment that will optimize or adversely impact friendly forces' means for supporting and sustaining the commander's operations plan. The sustainment preparations of the operational environment assist planning staffs to refine the sustainment estimate and concept of support. They identify friendly resources (host-nation support, contractible, or accessible assets) or environmental factors (endemic diseases, climate) that impact sustainment." (Army Doctrine Publication [ADP] 4-0, *Sustainment*, para. 73)

(U) TECHNIQUES AND PROCEDURES: Consider developing a comprehensive sustainment staff estimate that is updated throughout all phases of the operation. Refine and validate the PACE communications plan in each phase of the operation to ensure that the sustainment cell maximizes the efficiency of sustainment reporting, information flow, and communication with subordinate battalions. Additionally, BCT sustainment planners should continue to train on and use the operational logistics planner in the absence of timely and accurate logistical reporting. This should allow them to forecast support requirements and facilitate anticipatory logistics.

(U) ART 5.1.1, Plan Operations

(U) SOURCE: JRTC, Joint Multinational Readiness Center (JMRC)

(U) Improve OBSERVATION 2

(U) SUBJECT: Logistics support

(FOUO) OBSERVATION: Brigade signal companies struggle to provide logistics support to subordinate units.

(FOUO) DISCUSSION: Units often do not deploy with operator or technical manuals for their vehicles, generators, and communications systems. As a result, units struggle to complete preventive maintenance checks and services (PMCS) in the field environment and do not have systems in place to send updates back to the company command post from detached units. Sustainment operations to remote retransmission sites are not tasked effectively in the brigade operation order (OPORD), and signal companies often are expected to provide both sustainment and security to their detached subordinate units. (ART 4.1, Provide Logistics Support) Detached units do not have an SOP, and the company TACSOP does not have packing lists or checklists for leaders to perform precombat checks/precombat inspections prior to detaching the subordinate units. (ART 5.3.3, Manage Information and Data)

(U) TECHNIQUES AND PROCEDURES: Develop a company TACSOP at home station, and adjust it as systems and processes are updated within the unit.

(U) ART 4.1.1, Provide Field Maintenance Support; ART 5.2.1.3, Establish or Revise Standard Operating Procedures

(U) SOURCE: NTC

(U) Improve OBSERVATION 3

(U) SUBJECT: Lack of Class IX air parts

(FOUO) OBSERVATION: Units routinely arrive at JRTC without sufficient Class IX air parts to sustain their mission.

(FOUO) DISCUSSION: The shortage of these parts results not only in a lower task force operational readiness rate; the task force cancels specific missions because of non-mission-capable systems. The technical supply and parts control sections can alleviate problems by being more proactive before coming to JRTC.

(U) TECHNIQUES AND PROCEDURES: The commander is responsible for supporting logistics operations of customer units and the safeguarding of all supplies under their control. Aviation support company/troop (ASC/T) leaders are responsible for:

- Receiving, storing, inventorying, and issuing Class IX repair parts and safeguarding all supplies under their control.
- Establishing supply and storage procedures within their area of responsibility.
- Establishing authorized stockage lists of related Class IX repair parts.
- Supervising physical inventories of Class IX repair parts.
- Supervising location surveys.

(Combined Arms Training Strategy Task 01-2-7020, Provide Class IX Aircraft Repair Parts Support)

(U) The technical supply officer should reach out to the experts on each aircraft, compile of list of what the non-organic units plan to bring, thoroughly scrub the list, and recommend or make any changes as needed. “Technical supply coordinates with the supply support activity (SSA) to see if parts/components are available locally. If the part is not available at the SSA, check with other aviation units or activities. [Parts control] coordinates with similar units with the same mission design series (MDS) aircraft to see if parts are available.” (Training Circular 3-04.7, *Army Aviation Maintenance*, para. 1-74)

(U) The organic task force is often given a push package of parts by the non-organic units at the last minute without even knowing what they are bringing beforehand. Maintenance meetings and program reviews should begin well before actual deployments to JRTC, and the task force maintenance company should have a shared understanding with all MDS aircraft regarding what Class IX air parts are being deployed. Contingency plans should be developed for courses of action to acquire any parts that are not being deployed. This constitutes identifying roles and responsibilities to rear detachment personnel and key players in the support operations section at the aviation support battalion.

(U) ART 4.1.3.9, Provide Repair Parts (Class IX)

(U) SOURCE: JRTC

(U) Improve OBSERVATION 4

(U) SUBJECT: Combat repair team contact team support

(FOUO) OBSERVATION: M777 batteries within Stryker brigade combat teams often do not effectively manage combat repair team support to enable sustainment operations.

(FOUO) DISCUSSION: The limited number of contact teams in a firing battalion with more than 20 organic wheeled vehicles per battery can quickly degrade a unit's ability to project combat power because of inability to execute simple maintenance processes. Generally, only two contact teams are seen in a field artillery battalion to cover down on four batteries. This impedes the maintenance process because maintainers are constantly moving between batteries to verify faults and submit accurate reports for requisition of necessary parts and equipment. In particular, when batteries have vehicles that become non-mission-capable (NMC), there is more work than two teams can manage in a timely manner within the battery's positional area. Additionally, batteries are limited in their ability to conduct self-recovery, and there are very limited assets within the battalion to support these operations. Generally, every family of medium tactical vehicles in a firing battery is towing something: a howitzer, ammunition trailer, or water buffalo. Therefore, when a vehicle becomes NMC, two assets or multiple turns of one asset are needed to recover the down vehicle and the rolling stock it was towing.

(U) TECHNIQUES AND PROCEDURES: Within the battalion, priority of maintenance by unit or equipment type must be published and strictly followed in order to manage expectations and give guidance to the leaders of sustainment teams. SOPs must be developed to streamline the process of making maintainers available to every formation for verification of faults and correction of deficiencies in the field. Battalions must develop a plan for priority of recovery of assets so that everyone within the formation knows how to react when a vehicle has to be recovered during the course of operations.

(U) ART 4.1.1, Provide Field Maintenance Support

(U) SOURCE: NTC

(U) Improve OBSERVATION 5

(U) SUBJECT: Forward support troop mounted land navigation

(FOUO) OBSERVATION: Forward support troops routinely struggle to effectively and efficiently navigate during limited visibility while executing resupply operations.

(FOUO) DISCUSSION: This issue is particularly evident during periods in which illumination is low and the forward support troop has recently moved to a new location within the training area. Compounding the difficulty, the troop typically has only one or two functioning Blue Force Tracking systems, which are commonly located with the field trains command post or combat trains command post. This leaves the distribution platoon with only a map and an AN/PSN-13 Defense Advanced GPS Receiver (DAGR) with which to navigate during resupply operations. This limitation impedes coordination, battle tracking, and movement to the logistics release point. As a result of the navigational delays experienced during logistics package movement, personnel and resources occupy the logistics release point longer than necessary or, worse, the squadron's logistical efforts are desynchronized.

(U) TECHNIQUES AND PROCEDURES: During NTC rotations, units are forced to employ light discipline across terrain that is both unfamiliar and varying. Units can hone dismounted land navigation techniques at home station, and the fundamentals of those skill sets will translate directly to mounted land navigation. Additionally, basic and intermediate training on the DAGR is easy to develop and incorporate at home station and will be extremely beneficial during an NTC rotation.

(U) ART 1.2.10, Navigate From One Point to Another

(U) SOURCE: NTC

(U) Improve OBSERVATION 6

(U) SUBJECT: Casualty evacuation (CASEVAC)

(FOUO) OBSERVATION: Units struggle to facilitate CASEVAC. More than 95 percent of died-of-wounds cases occur between point of injury and Role 1.

(FOUO) DISCUSSION: Units often arrive having never trained on CASEVAC from point of injury to Role 1. When planning for casualties, units typically plan for small numbers, single events, and limited platforms. Squadrons routinely embed ambulances at the troop level, and troops do not plan for additional CASEVAC outside of the embedded medical vehicle. Ultimately, they are not effective in responding to the sheer number and breadth of casualties seen during a decisive action rotation.

(U) TECHNIQUES AND PROCEDURES: Squadron casualty collection points (CCPs) are established one-third of the distance from point of injury to Role 1. This allows first sergeants to quickly move casualties to the squadron CCP and return to the battlefield to continue to facilitate casualty evacuations. Troop CCPs are internal to the troop but provide a location for platoons to evacuate their casualties to a collection point for the first sergeants. The Role 1 supports the squadron CCPs by pushing two-thirds of the way toward the battlefield to collect the casualties. The distances are not a firm rule; they depend on the operational environment. This is where the first sergeant, staff, and medical officer need to synchronize. Casualty collection points are planned during course of action development. They are embedded into the scheme of maneuver and posted on sustainment graphics. As the unit pushes forward, additional CCPs become activated. This is usually easiest if they are triggered by phase lines.

(U) It is imperative that CASEVAC using non-medical vehicles is part of the planning process at all levels. This includes identifying the vehicles prior to movement, preparing them for arrival of casualties, conducting battle drills on the loading and unloading of patients from these vehicles, and checking the completion of these tasks during the leader's precombat inspection. Leaders identify vehicles to use for CASEVAC back to squadron CCPs. Leaders should ensure that primary CASEVAC vehicles at the platoon level have graphics and locations of the Role 2 or BCT AXP to enable movement of urgent casualties if the Role 1 ambulances are overwhelmed and/or time and distance permit the movement. The Role 1 needs to prioritize patients by severity of injuries. Those most urgent may be evacuated by ground ambulances. When capabilities are overwhelmed, CASEVAC vehicles augment the evacuation to Role 1 and potentially to Role 2. Units have demonstrated a reluctance to plan for these contingencies, resulting in massive numbers of died-of-wounds as units await the return of the ground ambulances.

(U) ART 4.3.2, Provide Medical Evacuation (Air and Ground)

(U) SOURCE: NTC, JMRC

(U) Improve OBSERVATION 7

(U) SUBJECT: Split operations and mission command at the medical platoon level

(FOUO) OBSERVATION: Medical platoons, in support of cavalry organizations, provide better support when they conduct split operations and maintain their maneuverability by being their own mission command nodes.

(FOUO) DISCUSSION: The splitting of the squadron aid station (SAS) into the main aid station (MAS) and forward aid station (FAS) is often met with resistance. It is seen as a burden to support both Role 1s logistically as well as with security. Units are reluctant to either split the SAS or deploy both Role 1s forward. By doctrine, the Role 1 is 4 kilometers behind the forward line of own troops; this requirement is often met with the deployment of the FAS forward. This makes responsive medical care next to impossible due to the sheer breadth and complexity of the mission. Another common practice is to locate the FAS with the combat trains command post and the MAS with the command post (CP). Units are comfortable providing logistical and security support in this manner. This renders the Role 1s non-value-added. Their strength is the ability to move quickly in both their treatment and evacuation capabilities.

(U) TECHNIQUES AND PROCEDURES: A way to employ the Role 1s to the greatest advantage is to push both forward. While under continuous contact, keeping the FAS ready to receive casualties as the MAS pushes forward to maintain that close proximity allows for uninterrupted Role 1 support. You can continuously push the MAS or FAS forward while one remains available, creating a “leap frog” appearance. Another means of employment, depending on terrain, is to deploy both forward in support of their respective troops. This generally occurs when the squadron mission involves separate corridors with terrain acting as a barrier between troops. Splitting the FAS and MAS as well as pushing them forward also serve to reduce evacuation times and avoid overwhelming resources. If FAS and MAS are utilized in their intended capacity, died-of-wounds casualties would be greatly reduced.

(U) ART 5.2.1, Conduct Command Post Operations to Support Tactical Operations; ART 5.2.2, Displace the Command Post; ART 4.3.1, Provide Combat Casualty Care

(U) SOURCE: NTC

(U) Improve OBSERVATION 8

(U) SUBJECT: Lack of coordination for air MEDEVAC

(FOUO) OBSERVATION: Several units have had issues with air MEDEVAC coordination. There are a number of factors that contribute to this, based on observations from the medical and staff observer-coach/trainers (OC/Ts). Some of these can be resolved at the battalion level, while others must be resolved at the brigade level.

(U) DISCUSSION:

(FOUO) **Battalion**: Most battalions opt not to conduct retransmission for administration and logistics (A&L). Most battalions are capable of retransmitting only three nets. These are typically the battalion command net, the battalion operations and intelligence (O&I) net, and the brigade fires net. Most battalions specify that 9-line MEDEVAC requests will be transmitted only on the A&L net because battalion commanders do not want to clog up the other nets with MEDEVAC coordination traffic. Too often, battalion CPs and TACs fail to monitor the A&L net traffic and, as a result, 9-line requests are not processed and forwarded to brigade. Often the battalion executive officer and staff do not completely understand the air MEDEVAC process. The medical officer has, at most, two means of requesting air MEDEVAC. One is via Blue Force Tracking (BFT)/ Force XXI Battle Command Brigade-and-Below Enhanced Position Location Reporting System (FBCB2/EPLRS), which allows the medical officer to go direct with the brigade surgeon cell to request for air MEDEVAC. This works when the system on the other end is being manned and used solely for MEDEVAC coordination. Often, however, medical officers will not receive receipt confirmation or updates on the status of their requests. As a result, patients die of wounds or are evacuated by ground. When BFT is down, the medical officer's last resort is frequency modulation (FM) communications. As mentioned above, if the A&L net is not being monitored, it becomes nearly impossible for the medical officer to coordinate for an air MEDEVAC without the assistance of battalion.

(FOUO) **Brigade**: Improve information flow to subordinate units by disseminating. One factor that contributes to a high died-of-wounds rate from Role 1 to Role 2 is the fact that medical officers sometimes wait for approval or denial of an air MEDEVAC request. When brigade does a poor job of pushing that information back down to the battalion, the medical officer on the ground is left with the decision to wait for the air ambulance or push via ground.

(U) TECHNIQUES AND PROCEDURES: Many units do not rehearse air MEDEVAC requests during the battalion or brigade sustainment rehearsals. As a result, personnel in the CP or TAC do not understand their role in a successful air MEDEVAC request. Rehearsing this would help to alleviate some of the issues that units have in coordinating for air MEDEVAC. Additionally, if medical platoons had equipment such as a tactical communications satellite (TACSAT) or high frequency (HF) radio, communication would be improved across the brigade. Instantaneous radio communication would enable the medical platoon leader on the ground to know how long he would have to wait for a helicopter and would help him make a better decision on whether patients must be pushed by ground to Role 2.

(U) ART 4.3.2, Provide Medical Evacuation (Air and Ground); ART 5.2.1, Conduct Command Post Operations to Support Tactical Operations

(U) SOURCE: NTC

(U) Improve OBSERVATION 9

(U) SUBJECT: Aerial resupply operations

(FOUO) OBSERVATION: Brigade support battalions often are not prepared to conduct aerial resupply operations.

(FOUO) DISCUSSION: Units frequently do not have sufficient sling load equipment. Soldiers are not air assault or sling load inspector certification (SLIC) trained prior to the rotation.

Throughout the rotation, the BSB has many opportunities to conduct aerial resupply operations. During the concept of sustainment brief, the rotational training unit states that it has dedicated aircraft for aerial resupply operations to mitigate the lack of ground logistical assets available both internal and external to the BCT.

(FOUO) TECHNIQUES AND PROCEDURES: Units should train and build systems and procedures to support aerial resupply operations at the BSB and field support command levels. Through brigade and division channels, battalion leaders must champion the necessity for these force multipliers in their formations. Sling load is only one type of aerial delivery, and it cannot be assumed that Soldiers understand how to configure and utilize the internal loads of CH-47s and UH-60s. Home station training with local aviation assets and subject matter experts can greatly enhance a unit's survivability by minimizing the number of trucks and Soldiers put on the road. Hot and cold load training can be conducted at low cost to the unit, and the battalion can cheaply purchase all needed supplies to maximize the loads.

(U) ART 5.1.1, Plan Operations; ART, 4.1.3.17, Prepare Configured Loads; ART 4.1.4.2, Provide Aerial Delivery Support

(U) SOURCE: NTC

(U) Improve OBSERVATION 10

(U) SUBJECT: Proficiency with night-vision goggles (NVGs) in maintenance companies

(FOUO) OBSERVATION: Many maintenance companies appear challenged to operate with NVGs.

(FOUO) DISCUSSION: A small percentage of Soldiers were capable of conducting tactical convoy operations at night in which none of those Soldiers was recovery operator (H8) certified. As a result, units could not recover vehicles at night. In a hostile environment, it is unrealistic that white light would be used to illuminate a work area, as it would potentially degrade light discipline in the brigade support area. Units should train this skill at home station.

(FOUO) TECHNIQUES AND PROCEDURES: Mechanics should be trained to conduct maintenance and recovery operations with NVGs.

(U) ART 1.1.2.1, Conduct Predeployment Activities

(U) SOURCE: NTC

(U) Improve OBSERVATION 11

(U) SUBJECT: Shared understanding across health service support (HSS)

(FOUO) OBSERVATION: Mission command for HSS is a common struggle within BCTs at the National Training Center.

(FOUO) DISCUSSION: Shared understanding of the maneuver plan often is known only by Role 1s and the brigade surgeon section (BSS), with very little situational awareness within the Role 2/C Medical (C Med) company. The HSS plan often is developed after the brigade or

battalion publishes the operation order for the mission. C Med owns more than 75 percent of the BCT's medical assets, yet very little collaboration is done between the BSS and the C Med commander. The support operations medical sections normally are undermanned and are used to complete other missions such as fuel or Class I, or to act as the SPO deputy. In one case, mission command for evacuation resided in the BSS. The SPO medical section was new and under-utilized; its Soldiers did not attend the leader training program. There were significant challenges throughout the rotation in sharing information with all Role 1s and the Role 2. During the combined arms rehearsal, all medical elements attended and the medical plan was briefed. The issue in this case was that the plan was strong, but not executed. The sustainment rehearsal had all the key medical personnel but no combined arms personnel. As a result, key leaders were not involved until it was time to execute. It is important to have command sergeant major (CSM) involvement during the planning process and rehearsal to ensure a successful execution.

(FOUO) TECHNIQUES AND PROCEDURES: Clearly identify the roles and responsibilities of all medical personnel. Ensure that they are counseled and informed of the key task they provide to the BCT. Collaboration and parallel planning must be done so that the HSS plan enables the BCT and provides the brigade commander operational reach. Ensure that combined arms personnel and medical personnel are involved in both the combined arms rehearsal and the sustainment rehearsal so that problems are noticed prior to execution.

(U) ART 5.1.1, Plan Operations

(U) SOURCE: NTC

(U) Improve OBSERVATION 12 Return to Common Observations

(U) SUBJECT: Multinational units and sustainment

(FOUO) OBSERVATION: Units are challenged in integrating multinational units into logistical support requirements.

(FOUO) DISCUSSION: Integrating non-organic units into the formation is a deliberate process that requires significant planning and coordination. Company/teams and higher-echelon units must clearly understand and account for the differing capabilities of each organization during MDMP and the TLP process. During MDMP, TLPs, and planning conferences, units must forecast multinational partners' classes of supply. If this is not accounted for, the unit will fail to effectively integrate multinational partners into the logistics support plan, thus creating a significant difference in capabilities and making it harder to sustain the brigade.

(FOUO) TECHNIQUES AND PROCEDURES: During planning conferences and prior to the execution of operations, ensure that an agreement is in place to sustain the multinational partners that are part of a task force. This will decrease friction and allow faster integration and team-building. During MDMP and TLPs, clearly define the command relationships between elements. Proper command relationships will decrease friction points within logistical support.

(U) ART 4.1, Provide logistics support

(U) SOURCE: JMRC

Chapter 8

Joint, Interagency, Intergovernmental, and Multinational

(U) Sustains

(U) Sustain OBSERVATION 1

(U) SUBJECT: Relationships with the consulate general

(U) OBSERVATION: Brigade combat teams (BCTs) have generally strong relationships with the Department of State, including the consulate general in the host country, as well as with international and nongovernmental organizations.

(U) DISCUSSION: When BCT commanders get personally involved and lead through example, they set the conditions for their staffs' and subordinate commanders' success. BCT commanders who met personally on an almost daily basis with the consulate general key staff were most effective in developing this effort.

(U) TECHNIQUES AND PROCEDURES: This level of involvement allows substantive issues to be discussed, such as security, interoperability, and transition planning. Joint/combined operations for the brigade to support nonlethal actions and for certain civilian agencies to support lethal actions then can be accomplished.

(U) Brigade commanders fostered operational cohesiveness through their commanders' guidance and involvement with the consulate, U.S. Government agencies, and international organizations and nongovernmental organizations.

(U) Army Tactical Task (ART) 7.6.2, Conduct Limited Interventions

(U) SOURCE: Joint Readiness Training Center (JRTC)

(U) Sustain OBSERVATION 2

(U) SUBJECT: Noncombatant evacuation operations (NEOs) in the decisive action training environment (DATE)

(U) OBSERVATION: Overall, NEOs are executed exceedingly well, with only minor issues.

(U) DISCUSSION: Advance preparation and coordination allowed rotational training units (RTUs) to conduct NEOs in accordance with Joint Publication (JP) 3-68, *Noncombatant Evacuation Operations*, and Department of State procedures (Foreign Affairs Manual 7 and Foreign Affairs Handbook 12). BCTs' handling of each evacuee was correct and courteous at each stage of the processing for evacuation. All evacuees were screened by a medic. BCT commanders were proactive in their interaction with consulate staff.

(U) TECHNIQUES AND PROCEDURES: Planning and preparation for NEOs was demonstrated repeatedly. Units that rehearsed NEOs as a tactical operation did well. RTU leaders took the time, prior to arrival, to understand the processes involved for an NEO and State Department procedures for emergency evacuations, including the emergency action

plan, tripwires, authorized departure, ordered departure, travel warnings, the warden message system, and the F-77 (registration of potential evacuees). BCTs effectively met the three guiding principles of an NEO:

- **Accuracy**: Account for all American citizens.
- **Security**: Safeguard evacuees and the evacuation force from all threats.
- **Speed**: Process evacuees quickly and efficiently.

(U) ART, 7.6.2.1, Perform Noncombatant Evacuation Operations

(U) SOURCE: JRTC

(U) Sustain OBSERVATION 3

(U) SUBJECT: Effective junior intelligence personnel

(U) OBSERVATION: Successful RTUs quickly establish contacts with the chief of base in the consulate.

(U) DISCUSSION: Successful units have at least one member of the BCT intelligence team visit the regional affairs officer each day to request information or advice on how to move forward with a certain action or operation.

(U) TECHNIQUES AND PROCEDURES: It is preferred to discuss options with the chief of station (CoS)/chief of base (CoB) prior to an operation to be sure everything is authorized rather than devote time and effort to cleaning up a disaster. Intelligence personnel should reach out to other interagency intelligence personnel who are in the same operational area to establish a common operating picture.

(U) ART 7.6.2, Conduct Limited Interventions

(U) SOURCE: JRTC

(U) Improves

(U) Improve OBSERVATION 1

(U) SUBJECT: Liaison team integration with the country team

(FOUO) OBSERVATION: Through multiple rotations, training units have failed to understand the importance of effective liaison with the U.S. country team, either at the consulate or embassy levels.

(FOUO) DISCUSSION: Without specific direction in a higher headquarters order, RTUs are left with little or no guidance on the selection, role, and capability of the liaison effort with the country team. The BCT often will take risk by not adequately managing the liaison effort. For example, there are not many incidents that require the level of specificity or immediacy of information distribution as those tied to chemical weapons. The country team is heavily dependent on the unit for information regarding who has chemical weapons, who is employing

chemical weapons, which chemical weapons are being used, and how they are being delivered. Yet, without effective resourced liaison elements, there is normally a delay of several days between the employment of gas against U.S. forces and the host nation before the country team was advised of what had occurred.

(FOUO) The rotations addressed in this document saw varying levels of liaison with the country team, ranging from a brigade tactical command post under the deputy brigade commander to a single liaison officer (LNO). Similar to decisions on composition and authority of the liaison cells, the RTUs also made decisions about the capabilities given to the liaison effort, such as secure digital communications, automation, and participation in multiple country team daily meetings. Three varying levels of engagement were specifically observed, as described below:

(FOUO) **No dedicated brigade LNO team present**: The brigade relied on its intelligence assets and the brigade special troops battalion, tasked with security for the consulate and Dara Lam, to perform LNO duties. This worked well when interacting with the regional security officer, Republic of Atropia, or United States Agency for International Development (USAID), but the task of acting as an LNO became secondary to the primary task/mission. While the brigade commander interacted with the country team multiple times a day, the LNO would have been a good source to send and receive information between the country team and brigade. A brigade LNO also would have provided a link between the country team and brigade S-3 for information on current and future operations, which may have facilitated coordination with the regional affairs officer.

(FOUO) **Dedicated LNO**: Although the brigade's sole LNO to the U.S. Embassy performed nearly flawlessly, and certainly far above his pay grade, questions were raised by several members of the U.S. Embassy country team as to why the RTU chose to send a staff sergeant as the primary conduit for all communications with the RTU and the lack of direct communications with the brigade. The LNO's primary assets were a notebook and a cellphone. In a real situation, the ambassador, through his country team, would insist on a field grade officer at a minimum as an LNO.

(FOUO) **Robust LNO section**: While not every brigade may have the ability to send its deputy commander as the head of the LNO team to the consulate, it was effective in this case. And based on the experience here, if the deputy commanding officer is not available it would be advantageous to assign another officer of equal or higher rank: if not a colonel, a lieutenant colonel or experienced major. During the early days of the rotation, the LNO team was effective in getting information from the country team to the brigade, but less effective in keeping the country team abreast of brigade activities. However, unlike some other rotations, early, specific requests for information were dealt with efficiently, and eventually the information flow became very effective once the liaison team's communications suite was operational.

(U) TECHNIQUES AND PROCEDURES: Units should be encouraged to assign LNOs with the rank and experience that will allow them to be effective in the critical role of developing and maintaining a strong relationship not just with the consulate, but with the host government and the international community. Further, the RTU should be provided guidance as to embassy requirements and specifications relating to LNO selection. In addition, the LNO should be organic, not attached or tactical control to the BCT, in order to maximize coordination with the entire BCT staff. The liaison team must be empowered to speak with the authority of the commander in engagements with the country team.

(U) Understanding that an LNO package is tailored to the requirement and is ad hoc in nature, the definitive "how to" book has yet to be written. As such, certain principles of information management become even more essential. A clearly established and disciplined information flow (centralized point of entry and exit) is critical to ensuring that all know where the repository of the latest truth should and does reside.

(U) ART 7.6.2, Conduct Limited Interventions

(U) SOURCE: JRTC

(U) Improve OBSERVATION 2

(U) SUBJECT: Host nation and country team engagement

(FOUO) OBSERVATION: After 13 years of counterinsurgency operations in countries that lacked effective host nation governance, RTUs often are unfamiliar with conducting military operations in a sovereign nation, tend to minimize the host nation's capabilities and legitimacy, and often do not recognize the presence of the U.S. country team.

(FOUO) DISCUSSION: The country team works with the deploying brigades prior to their entry into theater through a series of video teleconferences and provides updates on the operational environment. The senior levels of command participate in these conferences and seem to understand the environment, but such understanding is not apparent below the brigade level.

(FOUO) While the brigades recognize that building rapport with host nation officials/counterparts is necessary, the extent to which such rapport could help or hurt is not fully appreciated. In concert with the rapport building with the host nation, the brigades have exhibited varying degrees of acceptance of the U.S. country team and its roles and responsibilities in dealing as liaisons with the host nation. While there are a number of factors that may contribute to this, such as task saturation or a desire to remain independent from host nation officials, the training units must recognize that they are conducting operations in a sovereign nation and must respect the role of the country team in achieving U.S. policy objectives.

(FOUO) Generally speaking, the senior members of the brigade understand the relationship among the host nation, the U.S. country team, and U.S. military forces, but the further down from the brigade the information travels, the less apparent it is to the Soldier. In many rotations when members of the country team introduce themselves to brigade subordinate staff elements, they are mistakenly referred to as members of nongovernmental organizations (NGOs). These types of encounters highlight the fact that many Soldiers lack an understanding of what the Department of State and USAID are, what NGOs and international organizations (IOs) like the United Nations (UN) do, the roles of each of these very different organizations within their operational environment, and the roles those agencies play within the context of implementing U.S. foreign policy. In many instances, host nation counterparts are dealt with indifference by the lower levels of the brigade and are relegated to bystander status in their own country. Successful brigades engage with the host nation and work to leverage each other's strengths in order to achieve a common mission. Unsuccessful brigades fence off host nation officials and the international partners present and work in isolation, usually resulting in greater friction and lower probability of success.

(U) TECHNIQUES AND PROCEDURES: While it is true that different situations call for varying degrees of optimized rapport building, this task needs to be more than just a block checked on the "things to do" matrix. A priority should be given early on to assess, all things considered, how much time and energy should be devoted to building rapport, and a deliberate effort made to do just that. This cannot be an afterthought, especially when operating in sovereign countries. Units should develop and implement an engagement plan in concert with the U.S. country team for working with host nation officials and units. By linking their efforts with the country team and the host nation, units will achieve additional perspectives to help them better understand their operational environment.

(U) ART 7.6.2, Conduct Limited Interventions

(U) SOURCE: JRTC

(U) Improve OBSERVATION 3

(U) SUBJECT: Rules of engagement training and understanding

(FOUO) OBSERVATION: Rotations have been characterized by a large number of complaints about rude or aggressive behavior by U.S. Soldiers toward IOs/NGOs and host nation forces, as well as inability to distinguish hostile act/hostile intent from nonthreatening events.

(FOUO) DISCUSSION: In the DATE scenario at JRTC, Atropia is a sovereign nation that has requested supporting U.S. intervention. Unlike a country that has been invaded, a sovereign nation retains its capability to govern in accordance with international law and treaty. U.S. forces, as guests in the country, are forced to interact with the country team at the U.S. Embassy, where the ambassador gives the direction for engagements to accomplish U.S. national objectives. The training units also are exposed to working with the regional security officer for the Department of State, who prescribes additional rules of engagement. Humanitarians and UN observers repeatedly experience aggressive behavior from Soldiers, who fail to ask these people to show proper identification. Soldiers often lack training on acceptable forms of identification and their authorities to detain. Soldiers understand the enemy combatant and uniformed soldier engagement, but are less likely to understand dealing with other personnel. An example of failure to understand rules of engagement in a host nation is when a force assigned guard duty outside the U.S. Consulate took offensive action against a host nation uniformed army element present for a village meeting. Despite having been briefed on State Department rules of engagement, units engage without checking with the regional security officer and create a significant diplomatic problem between the United States and Atropia.

(U) TECHNIQUES AND PROCEDURES: Soldiers need to be trained on recognizing international organizations. They need to perform due diligence in checking the credentials of IO personnel in a less threatening manner. The military should warn these organizations of potential dangers in the area, but U.S. Soldiers need to understand they cannot detain or bully these organizations and prevent them from carrying out their duties. Brigades must understand the nature of the operation and fully train and rehearse the rules of engagement that they are directed to employ.

(U) ART 7.6.2, Conduct Limited Interventions

(U) SOURCE: JRTC

(U) Improve OBSERVATION 4

(U) SUBJECT: Coordination between the BCT and the regional security officer

(FOUO) OBSERVATION: Turnover of BCT security duties regarding the consulate complicates security planning and operations.

(FOUO) DISCUSSION: Units that treated security support to the consulate as a military mission and planned it accordingly were more effective. Full troop leading procedures including rehearsals provided excellent results when used. All too often, units as small as a platoon or squad were provided to the consulate. Units often rotated with another without including the regional security officer in the relief in place.

(U) TECHNIQUES AND PROCEDURES: Units should establish and maintain continuity in liaison and security operations.

(U) ART 7.6.2, Conduct Limited Interventions

(U) SOURCE: JRTC

(U) Improve OBSERVATION 5

(U) SUBJECT: The BCT S-2 relationship with the regional affairs officer

(FOUO) OBSERVATION: Senior intelligence personnel should make an effort to establish a personal relationship within the regional affairs officer.

(FOUO) DISCUSSION: Success in interagency operations requires much more interpersonal rapport building than is typically required within a military environment. Personal relationships in an interagency environment need to be established and maintained if one expects to gain access into a particular agency's "circle of trust." This aspect holds true with regard to the chief of station/chief of base as much as any other civilian-led organization.

(FOUO) TECHNIQUES AND PROCEDURES: Units should initiate a personal introduction by the unit's senior intelligence personnel at the earliest opportunity. This will provide three critical steps that support successful intelligence operations.

- First, the chief of station will be able to give the S-2/S-2X a current intelligence assessment of the operational area. **NOTE**: The regional affairs office also has a force protection mission to the chief of mission, and as such, can provide real-time force protection information to the unit.

- Second, this initial meeting will provide an excellent opportunity for the S-2/S-2X to inform the chief of station what priority information requirements are required for the unit to achieve its mission objectives.

- Third, the S-2/S-2X can use this first meeting as an opportunity to inform the chief of station of a "trusted agent" for future contact and to reduce conflicts of interest and duplication of effort. This simple action will promote improved understanding of those elements that make up Department of Defense/consulate interdependence.

ART 7.6.2, Conduct Limited Interventions

(U) SOURCE: JRTC

(U) Improve OBSERVATION 6

(U) SUBJECT: Reciprocity in intelligence sharing

(FOUO) OBSERVATION: If the regional affairs officer (RAO) shares reporting or provides access to sources, the expectation is that the unit will share reporting and forward copies of the contact reports generated from meetings with those sources.

(FOUO) DISCUSSION: Units tend to see the RAO as a supporting function when in fact the RAO is the senior intelligence entity. In the future, it is recommended that the unit push reports to the RAO — this will demonstrate competence and a willingness to work together, and encourage increased interaction between the RAO and the unit's intelligence sections.

(FOUO) TECHNIQUES AND PROCEDURES: Establish mature liaison with interagency partners based on respect and professional courtesy. Extra effort in this regard will pay great dividends in developing a more complete situational understanding.

ART 7.6.2, Conduct Limited Interventions

(U) SOURCE: JRTC

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Center for Army Leadership (CAL)

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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/cac2/csi/csipubs.asp>.

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.apd.army.mil> or the Central Army Registry (formerly known as 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 G2. 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>.

Military Review (MR)

MR is a revered 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.army.mil/cac2/militaryreview>.

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 at <https://atn.army.mil/media/dat/TRISA/trisa.aspx> (CAC login required).

Capability Development Integration Directorate (CDID)

CDID conducts analysis, experimentation, and integration to identify future requirements and manage current capabilities that enable the Army, as part of the Joint Force, to exercise Mission Command and to operationalize the Human Dimension. Find CDID at <http://usacac.army.mil/organizations/mccoe/cdid>.

Joint Center for International Security Force Assistance (JCISFA)

JCISFA's mission is to capture and analyze security force assistance (SFA) lessons from contemporary operations to advise combatant commands and military departments on appropriate doctrine; practices; and proven tactics, techniques, and procedures (TTP) to prepare for and conduct SFA missions efficiently. JCISFA was created to institutionalize SFA across DOD and serve as the DOD SFA Center of Excellence. Find JCISFA at <https://jcisfa.jcs.mil/Public/Index.aspx>.

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