



Research Product 98-18

**Direct and Lead Units During
Preparation for the Battle
(Battlefield Function 19)
as Accomplished by a
Direct Support Field Artillery Battalion
Volume 2: Assessment Package**

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Human Resources Research Organization

January 1998

Armored Forces Research Unit

U.S. Army Research Institute for the Behavioral and Social Sciences

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14. ABSTRACT (Maximum 200 words): The purpose of the overall research program was to document the synchronization required by command and control tasks performed within the armored brigade, to include combat support and combat service support units. The immediate application of the documentation was to support developers of staff training in two related projects: Battle Staff Training System and Staff Group Trainer. The documentation was also intended to assist with the planning and execution of collective training. The documentation approach was to apply function analysis (FA) techniques for battlefield functions (BFs) in the Command and Control battlefield operating system. Thirteen FAs were developed for the brigade headquarters and four supporting units: direct support field artillery battalion, engineer battalion, forward support battalion, and air defense artillery battery. The FAs were revised through a formative evaluation process that included internal review and successive external reviews by combat training centers, proponent agencies, and a review council representing potential users of the FAs. The final products include the FAs, a user's guide, and assessment packages for the BFs. This report provides the assessment package for BF 19 as performed by the direct support field artillery battalion.					
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FOREWORD

One of the goals for the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) is to facilitate the development of training strategies that will serve the needs of the combined arms team today and into the 21st century. The indispensable foundations, the cornerstones, for meeting this goal are solid information and data bases. One such base is a set of comprehensive descriptions of how soldiers accomplish their missions. Many task descriptions have been developed where the focus is on activities within a particular Battlefield Operating System (BOS); these are often further narrowed to one BOS element within one echelon. What have been lacking are function analyses along with task descriptions that have a broader BOS perspective; one which focuses not only on intra-BOS relationships, but also the relationships of that BOS with other BOSs in accomplishing the overall mission. It is this latter perspective which is needed, for example, to define training requirements and strategies for combined arms operations.

The assessment procedures described in this report are based on a function analysis resulting from one of three efforts conducted under the U.S. Army Research Institute project, "Innovative Tools and Techniques for Brigade and Below Staff Training (ITTBBST)." The work in this part of ITTBBST is the fifth in a series of ARI projects directed at analyzing the vertical and horizontal synchronization required by combined arms operations. All of the projects have analyzed functions, previously labeled "critical combat functions (CCFs)" and now labeled "battlefield functions (BFs)." The previous projects analyzed: all BFs performed by a heavy battalion task force; a sample of seven BFs performed by an armored brigade; and the integration of fire support BFs as performed by an armored brigade and at echelons higher than brigade. The research in this project analyzed BFs in the Command and Control BOS. Separate coordinated analyses of these BFs were performed for the armored brigade headquarters and four types of supporting units, one of which is the Direct Support Field Artillery Battalion.

The analyses developed in the project have been used in the development of staff training in related projects within the ITTBBST program. In addition, U.S. Army Training and Doctrine Command (TRADOC) representatives have identified a variety of applications by TRADOC training and other developers as well as potentials for collective training management.

ZITA M. SIMUTIS
Technical Director

ACKNOWLEDGMENTS

The assessment package contained in this volume is based on the battlefield function analysis presented in Volume 1. That analysis benefited from considerable dedicated effort on the part of many persons. The efforts of a few of these many persons are specifically and gratefully acknowledged here. An especially key person was MG (Ret) Lon E. Maggart, Commanding General of the U.S. Army Armor Center (USAARMC). Prior to and during the conduct of this effort, he contributed greatly to definition of training needs and concepts in support of Force XXI. He saw that battlefield functional analyses could provide a valuable foundation for Force XXI training development efforts; hence, MG (Ret) Maggart strongly backed these efforts.

COL G. Patrick Ritter and LTC Marvin K. Decker, acting in accordance and agreement with MG (Ret) Maggart's vision, vigorously pursued battlefield function analysis efforts and persevered in ensuring their application to Force XXI training developments. COL Ritter, Director of Directorate of Training Development and Doctrine (DTDD) at USAARMC, and LTC Decker, Chief of DTDD's Force XXI Training Program office, ensured implementation of necessary actions, and the participation of military subject matter experts and potential users of function analysis products as needed to assure quality outcomes.

Among many participants in performing the analyses themselves, and validating their integrity and validity, were members of the U.S. Army Field Artillery School (USAFAS), DTDD at USAARMC, and Operations Group at the National Training Center (NTC). Final recommendations and approval of these analyses were provided by proponents and users constituting the Force XXI Review Council. Members of the Review Council included: COL G. Patrick Ritter and LTC Marvin K. Decker, USAARMC; LTC James R. Harrison, U.S. Army Armor School; LTC David M. Annen, USAFAS; LTC Larry Newman, U.S. Army Air Defense Artillery School; COL Philip Federle, U.S. Army Engineer School; LTC Roger F. Murtie, National Training Center; LTC Gilbert Pearsall, Joint Readiness Training Center; COL Roger W. Jones, TRADOC Program Integration Office-Army Battle Command System; and COL Robert J. Fulcher, 29th Infantry Regiment.

The research for and preparation of this report benefited immeasurably from the assistance provided by members of the U.S. Army Research Institute. Specifically, the authors would like to acknowledge Dr. Kathy Quinkert for her continual support and guidance. As Contracting Officer's Representative, she interfaced with the FXXITP and the Army audience continually in providing program intent. Additionally, Ms. Dorothy Finley is acknowledged for serving as a peer reviewer for the product. She offered constructive comments that have improved both the content and style of the report. Also, special recognition is given to Ms. May Throne, a Consortium Research Fellow from the University of Louisville assigned to Fort Knox, and Ms. Lori Cracknell. Their never ending efforts to assist in the formal production of this report will not soon be forgotten.

DIRECT AND LEAD UNITS DURING PREPARATION FOR THE BATTLE (BATTLEFIELD FUNCTION 19) AS ACCOMPLISHED BY A DIRECT SUPPORT FIELD ARTILLERY BATTALION VOLUME 2: ASSESSMENT PACKAGE

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INTRODUCTION

The results of the Army Research Institute's examination of battlefield functions (BFs) relevant to a brigade combat team's combined arms operations are in a series of two volume sets. These sets cover brigade headquarters and the supporting units of air defense artillery battery, engineer battalion, field artillery battalion, and forward support battalion. Volume 1, Function Analysis, identifies and describes information and tasks necessary to accomplish the function. The analysis is targeted at planning and conducting collective training. Volume 2 provides an Assessment Package. It implements an assessment approach that identifies the purpose of the unit's action in relation to the function. This provides a basis for appraising the performance of the function and the outcomes resulting from it. The assessment package is intended to support the conduct of a training event, such as a field training exercise (FTX) or command post exercise (CPX). The package assists assessment planning, data collection, and using the collected data in the conduct of after action reviews (AARs). The materials assume skilled observers who can quickly identify when a unit is performing especially well or not, and, if not, the nature of the problem. Nothing in the Assessment Package can substitute for that expertise. The package adds value to two aspects of assessment. First, consistency in the assessment of multiple observers is facilitated through the consideration of the same outcomes and tasks. Second, efficiency in the assessment and AAR process is enhanced.

This assessment package is for the direct support field artillery battalion. It is organized to allow a commander or other observer to consider performance at several levels associated with increasingly focused questions:

- Did the unit achieve the purpose of the BF (e.g., for BF 19, to provide leadership, direction, command, and control during preparation for the battle)?
- If the purpose was not achieved, which outcomes did not occur? (e.g., Did subordinate leaders demonstrate an understanding of the critical elements of their own mission and mission essential tasks, the brigade mission, and the brigade commander's intent?)
- If an outcome did not occur or if performance was exemplary, what components of the outcome (e.g., backbriefs, rehearsals) or clusters of tasks (e.g., rehearsal tasks related to level of participation, priority of tasks, and realism) were notable strengths or weaknesses?

The tools provided in this Assessment Package include:

- Worksheet: This provides a means to record brief answers to each of above three questions.
- Assessment Strategy and Assessment Scale: The Strategy section advises where assessment personnel should be stationed to both observe performance, and review incoming information and outgoing products. The Assessment Scale can be used to assign evaluative ratings to both observations and products.
- Outcome Assessment Observations and Diagnostic Aids: These forms guide observers in making their evaluative ratings and then in further specifying, or diagnosing, any weakness in the observed performance.
- Product Review Measures of Effectiveness: These forms provide a means for collecting information regarding each of the products. They identify the products to be reviewed, which items to evaluate, and the information to be recorded.

Planning Assessment

The Assessment Strategy tool, briefly noted above, lists all outcomes that could be addressed, suggests where observers should be located, and specifies activities and products to be observed. The strategy helps commanders decide which outcomes should be addressed, guides the estimate of the number of observers and types of enemy forces required, and identifies the relevant assessment tools in the package (e.g., measures of effectiveness, outcome assessment guides, and diagnostic aids).

Conducting AARs

In assessing the training and organizing the AAR, the commander or observer progresses through three decisions. The first decision is whether the function was accomplished and if it should be addressed in the AAR. This decision is typically based on whether the unit accomplished the purpose of the function and the outcomes that support the purpose. The next level of choice is the selection of function outcomes that are appropriate for the AAR. This analysis is supported by objective measures in the Assessment Package's tables and a framework for systematic expert judgment concerning performance related to the outcome. The third level of selection concerns the specific behavior related to the outcome that was pivotal to the unit's success or failure. This selection is aided by data collected in accordance with the observation and product review guides for each component. In complex outcomes, the performance requirements are broken into components to help the commander or other observers focus their attention. In all cases, related tasks and supporting tasks are summarized to describe behavior required to achieve the outcome. Two types of measures help provide the desired consistency and efficiency.

Outcome Assessment Guides. These guides usually require the commander or observer to be present to watch the unit's actions and judge the results. Tasks and supporting tasks associated with each outcome are grouped into likely strengths or weaknesses. The guides are supported by diagnostic aids tied to the function analysis in Volume 1. The diagnostic aids list the tasks and supporting tasks that apply to the outcome components and task summaries.

Product Review Measures of Effectiveness. These measures help anchor the assessment with objective data. The tables associated with the measures of effectiveness should be completed for each event that covers the relevant outcomes. Over time, the measures will provide a context for showing how performance compares with other units or with previous performance by the subject unit. Many of the measures can be completed based on products, so the commander or observer does not have to view the performance. There should, however, be a mechanism in place to collect and process the information before the AAR.

WORKSHEET

MISSION _____
 DATE _____
 UNIT _____

Briefly state the intents of the division artillery (DIVARTY) commander and the armored brigade commander:

DIVARTY commander's intent:
Armored brigade commander's intent:

PURPOSE OF THE BF: To provide command, leadership, and control of the direct support (DS) field artillery (FA) battalion during the preparation phase to set conditions to accomplish the armored brigade mission within the division commander's intent.

Did the DS FA battalion (Bn) commander and staff achieve this purpose (circle one): YES NO
 If this performance exceeded the standard, please describe any techniques that enabled superior performance. These are techniques that you believe should be cited in the field artillery battalion AAR and, perhaps, relayed through lessons learned agencies to be shared with the rest of the Army.

--

Outcome	Achieved?	Notes
OUTCOME 1: The DS FA Bn command posts (CPs) maintain continuous communication with higher, adjacent, and subordinate headquarters.	Y N	
OUTCOME 2: The battalion commander, staff, and other key individuals within the DS FA Bn receive, evaluate, and process timely and accurate information on the adherence to timelines and quality of battle preparation.	Y N	
OUTCOME 3: Tactically sound recommendations are developed and critical information is communicated by the battalion staff and subordinate leaders.	Y N	
OUTCOME 4: Sound (feasible, suitable, acceptable) decisions are made by the DS FA Bn commander and others within the DS FA Bn.	Y N	

Outcome	Achieved?	Notes
OUTCOME 5: Affected units and personnel receive relevant direction, changes, and refinements to plans in time to perform troop leading procedures and required preparation.	Y N	
OUTCOME 6: Subordinate leaders demonstrate an understanding of the critical elements of their own mission, the DS FA Bn mission, the DS FA Bn commander's intent, and mission essential tasks.	Y N	
OUTCOME 7: Soldiers and units are disciplined and motivated to accomplish the mission.	Y N	

ASSESSMENT STRATEGY

Locations to observe unit performance and aspects of that performance relevant to assessment are suggested for each Outcome. The suggested locations and focus/focuses are not meant to be an exhaustive or all inclusive list.

Outcome	Location and Focus of Assessment
OUTCOME 1: The DS FA Bn command posts (CPs) maintain continuous communication with higher, adjacent, and subordinate headquarters.	Focus is on operating and monitoring nets. (Use Table 1) • At DS FA Bn tactical operations center (TOC), administrative and logistics operation center (ALOC), and battalion support operations center (BSOC) during preparation phase to check communications status. • At selected higher, adjacent, and subordinate headquarters (HQ) to confirm status of communications. • At DS FA Bn TOC, ALOC, and BSOC during preparation phase to check security of CPs.
OUTCOME 2: The battalion commander, staff, and other key individuals within the DS FA Bn receive, evaluate, and process timely and accurate information on the adherence to timelines and quality of battle preparation.	Focus is on situational awareness: Staff collection of information, use of information to update operations and intelligence products, and monitoring of preparation activities. (Use Tables 2, 3, 5, and 7) • With DS FA Bn staff at DS FA Bn TOC, ALOC, and BSOC to monitor obtaining, evaluating, incorporating, and transmitting information and to check for updates to products. • With opposing force (OPFOR) and subordinate units to identify changes to mission, enemy, terrain, troops, and time available (METT-T) conditions. • With DS FA Bn commander to monitor information he receives. • At subordinate units to check progress of preparation tasks. • At TOC and with subordinate units to check accuracy of records of combat power status. • At ALOC, BSOC, and with subordinate units to check accuracy of personnel and equipment status charts.

Outcome	Location and Focus of Assessment
OUTCOME 3: Tactically sound recommendations are developed and critical information is communicated by the battalion staff and subordinate leaders.	Focus is on the staff's providing critical information and recommendations. (Use Tables 5, 6, 7, and 8) • With DS FA Bn S3 to monitor information flow and receipt of responses to CCIR. • With DS FA Bn S3 to monitor coordination for recommendations from subordinate commanders and receipt of responses to CCIR. • With DS FA Bn commander, staff members, and battery commanders to assess quality of recommendations on changes to the DS FA Bn plan.
OUTCOME 4: Sound (feasible, suitable, acceptable) decisions are made by the DS FA Bn commander and others within the DS FA Bn.	Focus is on the commander's assessment and decision making, development of the fragmentary order (FRAGO) (if needed), and the soundness of the modified plan. (Use Tables 2, 3, 6, 7, and 8) • With DS FA Bn commander to monitor his decisions about whether to use current plan, revise plan, or initiate new plan when changes to METT-T occur. • With DS FA Bn commander to monitor decision making process. • With DS FA Bn commander during description of concept to assess suitability, feasibility, and acceptability of revised concept. • With DS FA Bn commander during preparation and execution phases to assess quality of decisions. • With supported maneuver brigade commander to assess quality of support.

Outcome	Location and Focus of Assessment
OUTCOME 5: Affected units and personnel receive relevant direction, changes, and refinements to plans in time to perform troop leading procedures and required preparation.	Focus is on the production of the FRAGO, issuing of FRAGOs, and units' taking required actions. (Use Table 4) • With DS FA Bn staff to assess completeness and timeliness of warning orders (WARNOs) and FRAGOs. • With subordinate units to monitor: -Whether and when units receive WARNO. -Whether units receive FRAGO in time to prepare. -Whether and when units receive subsequent FRAGOs. -Whether directions on preparations in response to FRAGO are consistent with DS FA Bn commander's intent.
OUTCOME 6: Subordinate leaders demonstrate an understanding of the critical elements of their own mission, the DS FA Bn mission, the DS FA Bn commander's intent, and mission essential tasks.	Focus is on the demonstration of understanding through briefbacks and during rehearsals. (Use Tables 6, 7, and 8) • With DS FA Bn commander and selected staff during unit visits to monitor briefbacks and situation reports. • At DS FA Bn rehearsal to assess contribution of participants vis a vis the DS FA Bn commander's intent and their missions. • At subordinate unit rehearsals to assess how well the planned actions of the participants support the DS FA Bn commander's intent. • With subordinate leaders to assess directions and orders they issue to their subordinates so as to verify the leaders' understanding of the DS FA Bn commander's intent. • With DS FA Bn commander when FRAGO is issued to monitor briefbacks.

Outcome

OUTCOME 7: Soldiers and units are disciplined and motivated to accomplish the mission.

Location and Focus of Assessment

Focus is on actions by the commander and staff to promote discipline and motivation and evidence from units that indicates the level of discipline and motivation. (Use Table 7)

- With DS FA Bn commander to monitor leadership techniques.
- With DS FA Bn staff to monitor actions in support of morale.
- With subordinate units to check for visits by DS FA Bn commander or staff.
- With subordinate units to assess military courtesy, appearance, and condition of equipment.

ASSESSMENT SCALE

Whenever the unit's performance must be rated with respect to an outcome or component of an outcome, the rating should be on the scale Adequate, Marginal, Not Adequate, defined below. Whenever these ratings are required, the outcome (or component) will be framed in a box with the rating scale, as in this example:

In each case, circle the appropriate rating, using the scale below for guidance:

OUTCOME 1: The DS FA Bn command posts (CPs) maintain continuous communication with higher, adjacent, and subordinate headquarters.	Adequate	Marginal	Not Adequate
---	----------	----------	--------------

Adequate

The unit can achieve the outcome to standard. Outcome is achieved with no significant shortcomings.

Marginal

The unit can achieve the outcome with some shortcomings.

Not Adequate

The unit cannot achieve the outcome to standard.

Two sub-sections are included with each Outcome's section to assist in the selection of an appropriate rating. These sub-sections should be used if the observer requires more information upon which to base a rating or requires precision to focus planning for training:

- 1) The first sub-section consists of assessment statements which orient the observer on observable performances related to the tasks contributing to achieving the Outcome. The assessment statements were derived by incorporating the substance of several tasks.
- 2) The second sub-section entitled Diagnostic Aid lists the tasks and subtasks supporting that particular Outcome. The diagnostic aid permits selection of specific tasks to facilitate planning future training.

Where appropriate due to complexity, some Outcomes have been divided into outcome components which are assessed separately.

OUTCOME ASSESSMENT OBSERVATIONS AND DIAGNOSIS

OUTCOME 1 ASSESSMENT

OUTCOME 1: DS FA Bn command posts (CPs) maintain continuous communications with higher, adjacent, and subordinate headquarters.	Adequate	Marginal	Not Adequate
--	----------	----------	--------------

(Use Table 1)

Assessment Statements

- The DS FA Bn CPs operate and monitor nets as shown in Table 1.
- The DS FA Bn BSOC communicates via wire with the supporting forward support battalion (FSB) CP/brigade rear CP in the brigade support area (BSA).
- The DS FA Bn CPs take action to survive.
 - Use cover, concealment, and routes which reduce detection by enemy.
 - Conduct local security to provide early warning and perimeter protection.
 - Designate a reaction force for immediate response.
 - Continually practice and monitor operations security (OPSEC).

OUTCOME 1 DIAGNOSTIC AID

OUTCOME 1: DS FA Bn command posts (CPs) maintain continuous communications with higher, adjacent, and subordinate headquarters.

Task Elements

1. **The direct support field artillery battalion command posts and staff manage and maintain command, control, and communications.**

1a. Battalion CPs manage means of communicating information. [Field manual (FM) 101-5, Chap 6 and appendix (App) B, L; Army Training and Evaluation Program (ARTEP) 6-115-MTP; Task 06-3-01-2150, 2160, 2120]

1a6 All DS FA battalion CPs eavesdrop on lower and adjacent unit command, and operations and intelligence (O&I) nets for information. [Field note (FN)-National Training Center (NTC)]

1a8 All DS FA battalion CP communicate routine information per DS FA battalion tactical standing operating procedures (TSOP). [FM 101-5, p. 6-5]

1a9 DS FA battalion S3 at the DS FA battalion TOC manages communication: [ARTEP 6-115-MTP, Task 06-06-3-01-2120, FM 6-20-1, pp. 6-7 - 6-21]

- a) Facilitates control and coordination for the DS FA battalion commander through communication with subordinate, adjacent, and supporting elements.
- b) Passes processed information and keeps the DS FA battalion commander updated on new information through concise, consolidated updates.

1b. DS FA battalion CPs maintain communications. [ARTEP 6-115-MTP, Task 6-2-02-3000, 5000, 06-2-02-4000, 06-2-01-6000; FM 6-20-40, Chap 2]

1b1 DS FA battalion CPs position so that the DS FA battalion commander maintains communications with higher, adjacent, reinforcing, and subordinate units to provide continuous fire support to the force during preparation and transition to battle. [FM 6-20-1, p. 3-25]

- a) The DS FA battalion commander exercises command and control during mission preparation.
 - b) DS FA battalion, battery, and platoon CPs displace, as required, prior to line of departure (LD) time or other mission execution time to provide most responsive fire support during the transition from preparation to the initiation of the battle.
 - c) DS FA battalion staff ensures that CPs are not detected by the enemy by using passive defense measures.
- 1b2 The DS FA battalion TOC positions prior to mission execution to:
- b) Maintain voice and digital communications with higher, adjacent, reinforcing, and subordinate units.
 - d) Supervise and manage the operation and monitoring of communications nets.
 - (1) DS FA battalion command (voice).
 - (2) Brigade command (voice).
 - (3) DS FA battalion fire support nets (voice and digital).
 - (4) DS FA battalion fire direction nets (voice and digital).
 - (5) DS FA battalion operations/fire (digital).
 - (6) DS FA battalion administrative/logistics (A/L) (voice).
 - (7) DIVARTY command (voice).
 - (8) DIVARTY operations/fire (voice and digital).
- 1b3 The DS FA battalion administration and logistics operation center (ALOC) positions prior to mission execution to conduct rapid movement of emergency Class (CL) III and V forward to support the DS FA battalion. [FM 6-20-1, p. 7-8]
- a) Monitors the DS FA battalion A/L net to determine subordinate unit combat service support (CSS) requirements.
 - c) The headquarters and headquarters battery (HQB) commander commands the combat trains. The DS FA battalion S4, assisted by the DS FA battalion personnel services noncommissioned officer (PSNCO), supervises ALOC operations in the combat trains. [FM 6-20-1, p. 7-5] [FM 6-20-40, p. F 4]
 - (1) Manages (net control station [NCS]) for the DS FA battalion A/L net; maintains communications with subordinate and supporting units and headquarters.
 - (2) Monitors the tactical situation and maintains communications to ensure that it is prepared to assume duties of the DS FA battalion TOC, if needed.
 - (3) Operates on and monitors communications nets.
 - (a) DS FA battalion command.
 - (b) DS FA battalion A/L.
 - (c) Brigade A/L.

- d) The DS FA battalion S1 supervises the DS FA battalion support operations center (BSOC) operations assisted by the DS FA battalion S4 noncommissioned officer in charge (NCOIC). The BSOC:
 - (1) Monitors the DS FA battalion A/L net and communicates with the supporting FSB elements by wire.
- 1b4 The DS FA battalion CPs take action to survive: [FM 6-20-1, p. 3-25]
 - a) The DS FA battalion CPs use cover, concealment, and routes which reduce detection by the enemy.
 - b) Local security is structured to provide early warning, perimeter protection, and a reaction force for immediate response.
 - c) OPSEC is continually monitored.
 - d) Risks to mission accomplishment and safety hazards are continuously assessed.
- 1b5 Communications are maintained without interruption with all subordinate elements and higher headquarters to allow the DS FA battalion commander and staff to exercise command and control. [FM 6-20-1, p. 3-26]
- 2. **Direct support field artillery battalion command posts acquire, evaluate, and communicate information and maintain status.** [U.S. Army Training and Doctrine Command (TRADOC) Pam 11-9, Section IV; "Battle Command," pp. 43, 65; ARTEP 6-115-20-MTP, Task 06-3-02-1100; FM 34-130, Chap 2; FM 6-20-40, Chap 2; FM 101-5, Chap 3, 5, App J]
 - 2a. The DS FA battalion staff officers acquire information. [TRADOC Pam 11-9, Chap 7 and App D]
 - 2a11 The DS FA battalion communications section obtains information concerning DS FA battalion communications requirements and capabilities. [ARTEP 6-115-MTP Task 06-8-01-4000, 06-7-01-4800, 06-1-01-4100]
 - b) Status of communications links from DS FA battalion CPs to brigade main and tactical (TAC) CP, battalion task force (TF) fire support officer (FSO)/fire support team (FIST)/combat observation lasing team (COLT), DIVARTY, reinforcing units, and other major subordinate command (MSC) CPs.
 - c) Updates from subordinate units on communications status.
 - (1) Status of communications links from DS FA battalion CPs to battery (Btry)/platoon (Plt) fire direction centers (FDCs).
 - (2) Operational status of equipment (secure and non-secure, digital and voice).
 - (3) Signal operating instructions (SOIs).
 - (4) Availability of subordinate unit communications personnel and equipment.
 - e) Status reports from retransmission stations.
 - (1) Positioning.

- (2) Equipment serviceability and capability.
- (3) Communication ranges and dead spaces.
- f) Information from the DS FA battalion executive officer (XO) and S3 about changes to proposed DS FA battalion CP locations and projected timelines.

5. **The direct support field artillery battalion commander directs and leads subordinate forces.** [TRADOC Pam 11-9, Chap 7 and App D]

5e. The DS FA battalion commander ensures that each BOS is integrated with other BOS during visits, backbriefs, and rehearsals. [FM 101-5, pp. H-36 - H-42]

5e6 The DS FA battalion commander integrates command and control with the other BOS.

- c) CPs and staff are prepared to support the mission.
 - (1) Ready to receive, process, and disseminate information.
 - (2) Move and position to support the DS FA battalion commander during the battle.
 - (3) Coordinate and integrate combat multipliers.
 - (4) Exchange information with brigade and adjacent units.

OUTCOME 2 ASSESSMENT

OUTCOME 2: The battalion commander, staff, and other key individuals within the DS FA Bn receive, evaluate, and process timely and accurate information on the adherence to timelines and quality of battle preparation. (Use Tables 2, 3, 5, and 7)

Component A: CPs obtain accurate critical information during preparation.	Adequate	Marginal	Not Adequate
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Assessment Statements

- The DS FA Bn commander designates and updates CCIR throughout the preparation phase.
- All staff officers, LNOs, and subordinate leaders focus information collection according to CCIR and to meet the staff's information requirements.
- Staff officers continually collect information from each other and external headquarters.
- The DS FA Bn CPs monitor or eavesdrop on the following nets for information:
 - Subordinate unit command.
 - Adjacent unit command.
 - Adjacent unit O&I.
 - Brigade command.
 - Brigade fire support.
 - DIVARTY command.
 - DIVARTY operations/fire (voice).

Component B: Staff officers evaluate information and update products.	Adequate	Marginal	Not Adequate
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Assessment Statements

- All staff sections and staff officers compare desired end states related to their areas of responsibility with the current DS FA Bn situation and trends.

- DS FA Bn CPs update operations products, administrative and logistics products, intelligence products, and decision support aids as shown in Table 3.
- All DS FA Bn staff officers, LNOs, and subordinate leaders keep the commander informed of factors impacting on his ability to perform his role as DS FA Bn commander or FSCCOORD for the brigade.

Component C: Commander and staff monitor adherence to timelines and quality of battle preparation.			
	Adequate	Marginal	Not Adequate

- The DS FA Bn commander visits at least those units that are most critical to the execution of his intent and designates staff and command sergeant major (CSM) to visit other units.
- The DS FA Bn commander, staff officers, and CSM assess units' preparations during visits and inspections.
- The DS FA Bn S3 and operations section maintain a timeline of planned vs. actual status of DS FA Bn preparations for battle.
- The DS FA Bn maintenance officer and maintenance section evaluate time projections for repair and return of critical combat vehicles (howitzers, ammunition vehicles, and fire support team vehicles (FISTVs)).
- The DS FA Bn TOC maintains record of current and projected combat power status (green-amber-red) of subordinate units.
- The DS FA Bn ALOC and BSOC maintain charts that show current and projected personnel and equipment status.
- All DS FA Bn CPs and staff provide briefings to the DS FA Bn commander on the status of mission preparedness.

OUTCOME 2 DIAGNOSTIC AID

OUTCOME 2: The battalion commander, staff, and other key individuals within the DS FA Bn receive, evaluate, and process timely and accurate information on the adherence to timelines and quality of battle preparation.

Task Elements

Component A: CPs obtain accurate critical information during preparation.

1. **The direct support field artillery battalion command posts and staff manage and maintain command, control, and communications.**
- 1a. Battalion CPs manage means of communicating information. [FM 101-5, Chap 6 and App B, L; ARTEP 6-115-MTP, Task 06-3-01-2150, 2160, 2120]
- 1a1 The DS FA battalion commander appoints an "information manager" from the staff (usually the battalion S3) to: [FM 101-5, Chap 6 and App B]
 - a) Facilitate the flow of information and communication of information from DS FA battalion staff members and subordinate units.
 - b) Outline and monitor the performance and responsibilities of the DS FA battalion staff in processing mission information, preparation status, and the DS FA battalion commander's information requirements.
 - c) Establish and enforce timelines.
- 1a2 The DS FA battalion XO, as primary logistician:
NOTE: The DS FA battalion XO is the second in command of the DS FA battalion. He is the senior staff officer of the unit and serves as the primary logistician. He must position himself, based on the location of the DS FA battalion commander, where he can best perform either function (e.g., when the DS FA battalion commander is with the brigade commander and staff, the XO may devote more of his time in his role as second in command). [FM 6-20-1, p. 3-4]
 - a) Supervises the activities of the DS FA battalion CSS staff.
- 1a3 The DS FA battalion assistant S3 manages the operations of the DS FA battalion tactical operations center (TOC) and the operations section when the DS FA battalion S3 is not available. [FM 6-20-1, p. 3-2]

a) Coordinates and integrates staff activities.

1a4 DS FA battalion S3 directs staff meetings: [AN]

b) Appraises completeness of information.

c) Identifies information gaps and directs actions to fill them.

1a5 Liaison officers (LNOs) provide information to the DS FA battalion commander and staff and to the headquarters they represent. Information includes: [FM 101-5, App L]

a) Responses to specific questions asked of LNO.

b) Unit locations, activities, capabilities, status, and intentions.

c) Identification of coordination problems.

(1) Inability to reach/meet with specific people or staff positions.

(2) Receipt of information which invalidates or should change estimates and plans.

1a6 All DS FA battalion CPs eavesdrop on lower and adjacent unit command, and operations and intelligence (O&I) nets for information. [FN-NTC]

1a7 All DS FA battalion CPs ensure that information on the situation is communicated between staff officers during shift changes. [FM 71-3, p. 3-25]

a) Enemy activities.

b) Status of subordinate units.

c) Ongoing staff actions which must be monitored, tracked, and completed.

d) Timelines and suspenses which must be met.

e) Planning for future missions.

2. **Direct support field artillery battalion command posts acquire, evaluate, and communicate information and maintain status.** [TRADOC Pam 11-9, Section IV; "Battle Command," pp. 43, 65; ARTEP 6-115-20-MTP, Task 06-3-02-1100; FM 34-130, Chap 2; FM 6-20-40, Chap 2; FM 101-5, Chap 3, 5, App J]

2a. The DS FA battalion staff officers acquire information. [TRADOC Pam 11-9, Chap 7 and App D]

- 2a1 The DS FA battalion commander obtains and communicates information relative to DS FA battalion preparations. [Author note (AN)]
- a) The DS FA battalion commander refines/updates his CCIR based on current situation. [FM 101-5, pp. 4-47, 4-48; 6-8, 6-9]
- (1) Refines his need for information based on his visualization of current and future desired endstates.
 - (2) Anticipates flow of the of the battle (e.g., changes in battle phasing) to assess validity of commander's critical information requirements (CCIR).
 - (3) Considers changes to METT-T which may alter information requirements.
- b) The DS FA battalion commander receives new guidance or missions from the brigade commander.
- c) The DS FA battalion commander obtains and communicates information concerning DS FA battalion preparations from the DS FA battalion staff, from subordinate and supporting commanders, and during personal visits and inspections.
- 2a2 The DS FA battalion S3 manages the flow of information in the DS FA battalion TOC and establishes a system to keep the DS FA battalion commander informed. [FM 101-5, pp. 6-2, 6-11, 6-34; ARTEP 6-115-MTP, Task 06-3-01-2110]
- 2a3 All DS FA battalion staff officers, LNOs, and subordinate leaders obtain information; they commonly: [FM 101-5, pp. 3-84, C-4, Chap 6, App A]
- a) Focus information collection according to CCIR and staff information requirements relevant to their areas of responsibility and immediately communicate any response to CCIR to the DS FA battalion commander, XO, and S3. Information required by other staff officers is passed directly to them. [FM 101-5, pp. 6-8, 6-11, 6-16, and C-4]
 - b) Obtain information relevant to fulfilling their areas of responsibility for the DS FA battalion's preparations for battle in order to: [FM 101-5, pp. 6-33, 6-34]
 - (1) Monitor and modify preparation activities as necessary.
 - (2) Keep the commander informed of factors impacting on his ability to perform his role as DS FA battalion commander or fire support coordinator (FSCOORD) for the brigade.
 - c) Provide updates to the DS FA battalion commander on their functional areas. [FM 101-5, pp. 6-33, C-2]
 - d) Continually coordinate with each other personally and with external headquarters to obtain information which includes: [FM 101-5, p. 3-84, App A]
 - (1) Specific information requirements, e.g., information to assist the DS FA battalion S2 with refinement of the DS FA battalion intelligence preparation of the battlefield (IPB); information to assist the DS FA battalion S3 regarding units' requirements for use of terrain in the brigade area.
 - (2) Updates/modifications of CCIR as directed by the DS FA battalion commander during:

- (a) Rehearsals.
- (b) Backbriefs.
- (c) Commander visits.

2a4 The DS FA battalion CSM obtains information during visits and inspections and advises the DS FA battalion commander on: (discussed in tasks 2 and 4 of this task analysis) [AN]

- a) Morale, discipline, and adherence to standards by DS FA battalion soldiers.
- b) Assessment of units' preparations.
- c) Assessment of CSS system.
- d) Assessment of the welfare of DS FA battalion soldiers.
- e) Other duties or information requested by the DS FA battalion commander.

2a5 The DS FA battalion S2 section obtains intelligence information: [FM 101-5, pp. C-7, C-8; FM 34-130, Chap 2]

- a) From brigade and DIVARTY S2s and DS FA battalion staff, obtains: [FM 6-20-1, pp. 3-10 - 3-12]
 - (1) Changes from the DS FA battalion commander to guidance and mission concept and his requirements for intelligence information determined during rehearsals and backbriefs.
 - (2) Intelligence summaries (INTSUM) and spot reports from brigade, DIVARTY, and higher headquarters.
 - (3) Information from brigade, DIVARTY, and adjacent units.
 - (4) OPSEC reports from the DS FA battalion S3/operations section and subordinate units which contribute to analysis of DS FA battalion security posture.
 - (5) Information on current situation learned by eavesdropping on brigade, DIVARTY, and adjacent unit command and O&I nets.
- b) From subordinate units including: [ARTEP 6-115-MTP, Task 06-3-01-2512]
 - (1) FISTs, FSOs, COLTs.
 - (2) Survey parties.
 - (3) Battery defense observation posts (OPs) and listening posts (LPs).
 - (4) Battery advance parties.
 - (5) Radars attached to or organic to or otherwise supporting the DS FA battalion.
- c) From DS FA battalion special staff officers. [FM 101-5, App A]
- d) From LNOs from/to higher, adjacent, and supporting units. [FM 101-5, App L]
- e) From other sources such as:
 - (1) Aerial photographs.

- (2) Prisoners, deserters, and civilian population.
- (3) Electronic warfare (EW), radars, and sensors.
- (4) Unmanned aerial vehicles (UAVs).

2a6

DS FA battalion S3 section obtains operations information (i.e., changes to METT-T and status of battlefield operating systems [BOS]). [FM 101-5, pp. C-8, C-9]

a) From DS FA battalion, brigade, and DIVARTY commanders and S3s which may affect operations. [ARTEP 6-115-MTP, Task 06-3-01-2110, 2120]

- (1) Direction from the DS FA battalion commander.
 - (a) Changes to mission concept or details of the plan.
 - (b) Requirements for information determined during rehearsals and backbriefs.
 - (c) Other guidance and directives.
- (2) FRAGOs/WARNOs from brigade commander, S3, or brigade FSO.
- (3) Situation updates from brigade FSO or other brigade staff such as:
 - (a) Situation reports (SITREPs).
 - (b) Responses on queries and requests submitted by the DS FA battalion.
 - (c) Changes to brigade situation which necessitate changes to DS FA battalion OPSEC posture.
- (4) Division and corps units requiring terrain in the brigade area of operations (AO).

b) From subordinate units including: [ARTEP 6-115-MTP, Task 06-3-01-2110, 2150]

- (1) Changes to subordinate units' plans.
- (2) Status of preparations.
- (3) Reports.
 - (a) Enemy contact.
 - (b) Current and projected strength and combat power.
 - (c) OPSEC reports.
 - (d) Results of local security operations.

(4) Requests for resources based on mission analyses and determination of needs to accomplish assigned tasks.

(5) Recommendations for changes to the DS FA battalion plan based on their current and projected status.

c) From other staff officers and LNOs. [ARTEP 6-115-MTP, Task 06-3-01-2120; FM 101-5, App A]

(1) Information from the DS FA battalion S2 and intelligence section which confirms or refutes operations estimate of the situation.

(2) Updates from DS FA battalion S1/S4.

- (a) Personnel and unit status.
- (b) Vehicle and equipment status.
- (c) Status of all classes of supply.
- (3) Updates from brigade fire support element (FSE).
- (4) Updates from DS FA Bn signal officer (SO) on the status of DS FA battalion communications links and systems.
- (5) Updates from chemical officer (CMLO) on the status and planned employment of chemical units.
- d) From DS FA battalion staff, battalion TFs, and other units about terrain requirements in order for the brigade S3 to deconflict terrain requirements for all units operating in the brigade area. [FM 101-5, Chap 3]

2a7 The DS FA battalion FDC section obtains information to include: [ARTEP 6-115-MTP, Task 06-3-02-2320; FM 6-20-1, p. 3-3; FM 6-40]

- a) Changes from the DS FA battalion commander, S3, and brigade FSO to guidance and mission concept and requirements for information to assist in the development of the commander's criteria for IFSAS and AFATDS.
- b) Intelligence information from the DS FA battalion S2, brigade FSE, and DIVARTY S2 via improved fire support automation system (IFSAS) and advanced field artillery tactical data system (AFATDS) artillery target intelligence (ATI) files.
- c) Changes from the brigade FSO, DS FA battalion S3, and battalion FSOs to preplanned and scheduled fires.
- d) IPB integration with S2 and assistant S3.
 - (1) Site selection.
 - (2) Intervening crest/site to crest.
 - (3) Ranges to critical targets by phase.
 - (4) Munitions available.
 - (5) Engagement criteria.
- e) Changes to firing parameters (requirements for accurate predicted fires).
 - (1) Accurate target location and size.
 - (2) Accurate firing unit location.
 - (3) Weapon and ammunition information.
 - (4) Meteorology information.
 - (5) Computational procedures.
- f) Updated information from battery FDCs.

- 2a8 The brigade FSCoord, brigade FSO, and FSE section obtain fire support information. [FM 6-20, pp. 2-22, 2-23; FM 6-20-40, Chap 4; ARTEP 71-3-MTP, Task 9002/1b, 3, 9003/1a, 9004/1a]
- a) Changes from the brigade commander to guidance and mission concept and requirements for information.
 - b) Intelligence information from the DS FA battalion S2, brigade S2, division FSE, and DIVARTY TOC.
 - (1) Enemy capabilities to detect, acquire, or attack the DS FA battalion with indirect or direct fires.
 - (2) Responses to information and intelligence queries submitted by the DS FA battalion previously.
 - (3) Target acquisition assets and plans.
 - c) Field artillery status from DS FA battalion S3.
 - (1) Current and projected locations of units.
 - (2) Current and projected unit weapons status.
 - (3) Current and projected ammunition status.
 - d) Field artillery status from DIVARTY and division FSE.
 - (1) Organization for combat (including general support (GS), general support reinforcing (GSR) FA).
 - (2) Locations and status of GS and GSR batteries and platoons.
 - (3) Status and locations of counter-battery radars.
 - (4) Status and timing of meteorological support.
 - (5) Division or corps-directed fire support coordinating measure (FSCM).
 - e) Task organization, personnel and equipment status, and status of preparations from battalion TF FSOs.
 - (1) COLTs.
 - (2) FISTs.
 - (3) Mortars.
 - (a) Mortar tubes and vehicles.
 - (b) Personnel.
 - (c) Locations of sections and FDCs.
 - (d) Ammunition status.
 - (4) Ammunition types.
 - (5) Ammunition quantities.
 - f) Bottom-up refinements regarding projected locations, targets, and timelines from:
 - (1) Refinement of battalion TFs fire plans and target lists.
 - (2) Refinement of intelligence information from scout platoons.
 - (3) COLTs and other observers.
 - (4) Refinement of data for final protective fires (FPFs).

- (5) FSCM.
 - g) Availability and locations of EW assets from DS FA battalion S2.
 - h) Information necessary to refine plans for coverage of obstacles and adjustments to FASCAM employment from the brigade engineer.
 - i) Fire support requirements from the DS FA battalion S4 and FSB commander to support the brigade support area (BSA).
- 2a9 The DS FA battalion reconnaissance and survey officer (RSO) obtains information concerning the DS FA battalion survey operations. [ARTEP 6-115-MTP, Task 06-8-02-2700; FM 6-2, pp. 15-13, 14]
 - a) Changes from the DS FA battalion commander on survey priorities.
 - b) Intelligence data from the DS FA battalion S2.
 - (1) Enemy activity effecting survey operations.
 - (2) Impact of weather and terrain on survey capabilities.
 - (3) Requirements to survey sensor links.
 - (4) Impact of nuclear, biological, and chemical (NBC) hazards on survey operations.
 - c) Information from DS FA battalion S3.
 - (1) Status of movement planning that may affect survey operations.
 - (2) Changes to task organization that affect survey priorities.
 - (3) Additional survey requirements from brigade.
 - d) Status of survey teams:
 - (1) Equipment.
 - (2) Personnel.
 - (3) Response to timelines.
- 2a10 The DS FA battalion CMLO obtains information concerning friendly and enemy NBC status. [ARTEP 6-115-MTP, Task 03-3-C201, C202]
 - a) Changes from the DS FA battalion commander to guidance, mission concept, and requirements for information.
 - b) NBC warning and reporting system (NBCWRS) updates from brigade and DIVARTY.
 - c) Status and location updates for NBC equipment and supplies from subordinate units and DS FA battalion S4.
 - d) Status and location of decontamination and reconnaissance assets from brigade CMLO.
 - e) NBC monitoring and surveillance reports from subordinate units.

- f) Information from the DS FA battalion S2 and intelligence section which confirms or refutes estimate of NBC threat and requirements.
 - g) Changes to brigade and subordinate units' plans in terms of projected locations, decontamination requirements, and timelines.
- 2a11 The DS FA battalion communications section obtains information concerning DS FA battalion communications requirements and capabilities. [ARTEP 6-115-MTP, Task 06-8-01-4000, 06-7-01-4800, 06-1-01-4100]
- a) Changes from the DS FA battalion commander to guidance, mission concept, and requirements for information.
 - b) Status of communications links from DS FA battalion CPs to brigade main and tactical command post (TAC CP), battalion TF FSO/FIST/COLT, DIVARTY, reinforcing units, and other major subordinate command (MSC) CPs.
 - c) Updates from subordinate units on communications status.
 - (1) Status of communications links from DS FA battalion CPs to Btry/Plt FDCs.
 - (2) Operational status of equipment (secure and non-secure, digital and voice).
 - (3) Signal operating instructions (SOIs).
 - (4) Availability of subordinate unit communications personnel and equipment.
 - d) Information from the DS FA battalion S2 and intelligence section.
 - (1) Which confirms or refutes estimate of communications requirements.
 - (2) Updates on enemy electronic and communication capabilities.
 - e) Status reports from retransmission stations.
 - (1) Positioning.
 - (2) Equipment serviceability and capability.
 - (3) Communication ranges and dead spaces.
 - f) Information from the DS FA battalion XO and S3 about changes to proposed DS FA battalion CP locations and projected timelines.
 - g) Changes to battalion TF and subordinate units' plans in terms of projected locations and timelines.
- 2a12 The DS FA battalion S1 section obtains information: [ARTEP 6-115-MTP, Task 12-1-C404; FM 101-5, p. C-5; FM 6-20-1, pp. 7-7, 7-21, 7-22]
- a) Changes from the DS FA battalion commander to guidance, mission concept, priorities, and requirements for information.
 - b) Information from the DS FA battalion S2 and S2 section which confirms or refutes estimates of personnel situation and casualty estimates.

- c) Personnel status from subordinate and supporting units.
 - (1) Personnel status reports (PERSTATREP).
 - (2) Critical military occupational specialty (MOS)/grade shortages.
 - (3) Absent without leave (AWOLs).
 - (4) Casualty feeder reports.
- d) Personnel information from DIVARTY S1/adjutant general (AG).
 - (1) Availability of replacements and replacement operations.
 - (2) Postal services.
 - (3) Morale welfare and recreation (MWR) support.
- e) Morale and discipline indicators from brigade, DIVARTY, and DS FA battalion special staff officers.
 - (1) Uniform code of military justice (UCMJ) rates from staff judge advocate (SJA).
 - (2) Straggler and crime rates from the division provost marshal.
 - (3) Sick call and stress casualties from DS FA battalion surgeon.
 - (4) Complaints information from the inspector general (IG).
 - (5) Feedback of leader and soldier concerns from the chaplain.
- f) FSB support capabilities from the FSB support operations center.
- g) Information from the supported brigade military police (MP) platoon leader concerning enemy prisoner of war (EPW) processing and evacuation requirements.

2a13 The DS FA battalion S4 section obtains information. [ARTEP 6-115-MTP, Task 06-3-01-6430; FM 101-5, p. C-9; FM 6-20-1, pp. 7-10, 7-11]

- a) Changes from the DS FA battalion commander to guidance, mission concept, priorities, and information requirements.
- b) Information from the DS FA battalion S2 and S2 section which confirms or refutes estimates of the logistical situation.
- c) Logistics reports from subordinate and supporting units.
 - (1) Status of supplies.
 - (2) Equipment readiness.
 - (3) Task organization and status of CSS elements:
 - (a) Field trains.
 - (b) Combat trains.
 - (4) Maintenance, transportation, and supply updates from the brigade S4 and FSB support operations center (including plans for weapons system replacement operations [WSRO]).

- (5) Information from the division ammunition officer (DAO) on the location of ammunition supply points and ammunition transfer points (ASP/ATPs).

- 2a14 The DS FA battalion surgeon obtains information. [ARTEP 6-115-MTP, Task 08-3-C003; FM 6-20-1, p. 7-23, 7-24]
 - a) Changes from the DS FA battalion commander to guidance, mission concept, priorities, and information requirements.
 - b) Information from the DS FA battalion S2 and S2 section which confirms or refutes estimates of the casualty situation.
 - c) Medical updates and aerial medical evacuation capabilities from the brigade surgeon.
 - d) CL VIII supply updates from the division medical supply officer.
 - e) Additional medical support capability from the main support battalion (MSB).
 - f) Supporting unit medical support status.
 - (1) Positioning and readiness of medical assets.
 - (2) Capability to receive, triage, and evacuate casualties.
 - g) Changes to supporting unit plans in terms of projected locations and times.
 - h) Medical evacuation and support concepts from brigade surgeon for FSO/FIST personnel.
- 2a15 The DS FA battalion ALOC/BSOC obtain information from: [FM 6-20-1, pp. 7-1 - 7-10]
 - a) Changes from the DS FA battalion commander to guidance, mission, concept, priorities, and information requirements.
 - b) Information from the DS FA battalion S2 and S2 section which confirms or refutes estimates of the CSS situation.
 - c) Changes to guidance, priorities and requirements from the FSB commander.
 - (1) CSS task organization.
 - (2) Tasks to provide CSS support to division and corps units.
 - d) Information from the MSB regarding backup CSS support.
 - e) Information from the division material management center (DMMC) concerning supply and maintenance management support.
 - f) Information from supported units regarding their requirements.
 - g) Information from all organizations in the BSA (for defense and terrain management).
- 2a16 The HHB commander obtains information necessary to support the TOC and the ALOC. [FM 6-20-1, pp. 3-1, 3-6, 7-1, 7-10]
 - a) Obtains changes to DS FA battalion commander guidance, mission concept, and information requirements from the DS FA battalion S3.
 - b) Obtains information from the DS FA battalion S2 and S2 section which confirms or refutes enemy threat to the TOC/ALOC.

- c) Obtains anticipated movement times and projected locations for the CP and combat trains from the DS FA battalion XO and S3.
 - d) Obtains information from attachments/supporting agencies concerning space, supply, and support requirements.
5. **The direct support field artillery battalion commander directs and leads subordinate forces.** [TRADOC Pam 11-9, Chap 7 and App D]
- 5e. The DS FA battalion commander ensures that each BOS is integrated with other BOS during visits, backbriefs, and rehearsals. [FM 101-5, pp. H-36 - H-42]
- 5e1 The DS FA battalion commander determines the state of DS FA battalion preparedness through visits and inspections. [Battle Command, p. 10-15]

Component B: Staff officers evaluate information and update products.

1. **The direct support field artillery battalion command posts and staff manage and maintain command, control, and communications.**
- 1a. Battalion CPs manage means of communicating information. [FM 101-5, Chap 6 and App B, L; ARTEP 6-115-MTP, Task 06-3-01-2150, 2160, 2120]
- 1a2 The DS FA battalion XO, as primary logistician:
 NOTE: The DS FA battalion XO is the second in command of the DS FA battalion. He is the senior staff officer of the unit and serves as the primary logistician. He must position himself, based on the location of the DS FA battalion commander, where he can best perform either function (e.g., when the DS FA battalion commander is with the brigade commander and staff, the XO may devote more of his time in his role as second in command). [FM 6-20-1, p. 3-4]
- a) Supervises the activities of the DS FA battalion CSS staff.
 - b) Ensures that DS FA battalion units are logistically sustained.
- 1a3 The DS FA battalion assistant S3 manages the operations of the DS FA battalion tactical operations center (TOC) and the operations section when the DS FA battalion S3 is not available. [FM 6-20-1, p. 3-2]
- a) Coordinates and integrates staff activities.

c) Enforces timelines.

2. **Direct support field artillery battalion command posts acquire, evaluate, and communicate information and maintain status.** [TRADOC Pam 11-9, Section IV; "Battle Command," pp. 43, 65; ARTEP 6-115-20-MTP, Task 06-3-02-1100; FM 34-130, Chap 2; FM 6-20-40, Chap 2; FM 101-5, Chap 3, 5, App J]

2a. The DS FA battalion staff officers acquire information. [TRADOC Pam 11-9, Chap 7 and App D]

2a1 The DS FA battalion commander obtains and communicates information relative to DS FA battalion preparations. [AN]

a) The DS FA battalion commander refines/updates his CCIR based on current situation. [FM 101-5, pp. 4-47, 4-48, 6-8, 6-9]

- (1) Refines his need for information based on his visualization of current and future desired endstates.
- (2) Anticipates flow of the of the battle (e.g., changes in battle phasing) to assess validity of CCIR.
- (3) Considers changes to METT-T which may alter information requirements.

2a3 All DS FA battalion staff officers, LNOs, and subordinate leaders obtain information; they commonly: [FM 101-5, pp. 3-84, C-4, Chap 6, App A]

b) Obtain information relevant to fulfilling their areas of responsibility for the DS FA battalion's preparations for battle in order to: [FM 101-5, pp. 6-33, 6-34]

- (1) Monitor and modify preparation activities as necessary.
- (2) Keep the commander informed of factors impacting on his ability to perform his role as DS FA battalion commander or FSCOORD for the brigade.

2b. The DS FA battalion CPs evaluate acquired information and update products. [FM 6-20-1 p. 3-1; FM 101-5, Chap 6; ARTEP 6-115-MTP, Task 06-1-02-2500]

2b1 The DS FA battalion S2 and intelligence section evaluate intelligence information and update IPB products. [ARTEP 6-115-MTP, Task 06-1-02-2500]

a) The DS FA battalion S2 and intelligence section track the enemy to support evaluation:

- (1) Locations (confirmed and suspected).
- (2) Activity.
 - (a) Indications of possible intent.

- (b) Enemy reactions to friendly battle techniques.
- (c) Specific enemy actions triggered by friendly actions or events.
- (3) Adherence to, or deviation from, postulated enemy course of action (COA).
- (4) Losses so as to analyze strengths and capabilities.
- b) The DS FA battalion S2 and intelligence section evaluate intelligence information. [ARTEP 6-115-MTP Task 06-3-01-2512]
- (1) Evaluate changes to guidance/direction and information.
- (2) Compare desired DS FA battalion endstates with current intelligence situation, trends, and IPB.
- (3) Evaluate information which confirms or refutes IPB information relative to achieving the DS FA battalion commander's intent:
 - (a) Information requirement (IR)/priority intelligence requirement (PIR).
 - (b) Named areas of interest (NAIs) and target areas of interest (TAIs).
- (4) Determine whether collection and sensor plans continue to meet DS FA battalion commander's intent.
 - (a) Positioning of assets to collect PIR and IR.
 - (b) Positioning of assets to maintain constant observation of NAIs and TAIs.
 - (c) Positioning of assets to detect and track high payoff targets (HPTs), to provide observation for attack of HPTs, and to provide target effects for battle damage assessment (BDA) on HPT following attack.
 - (d) Positioning of Firefinder radars. [FN-NTC]
- (5) Evaluate indicators of enemy intentions:
 - (a) NBC weapons usage or activity as a prelude to offensive operations.
 - (b) Presence of enemy reconnaissance forces as a prelude to attack.
 - (c) Enemy conduct of counter-reconnaissance operations as an indicator of defense.
 - (d) Presence and massing of enemy maneuver forces as an indication of offensive operations.
 - (e) Increase of enemy helicopter activity as an indication of air assault operations.
 - (f) Increase in enemy fighter activity and massing of transport fixed wing aircraft as indicators of airborne assault or start of offensive operations.
 - (g) Increase of enemy field artillery and rocket unit activity as an indicator of the initiation of offensive operations.
 - (h) Presence and nature of activity of enemy engineer systems as an indicator of defensive or offensive operation.
 - (i) Meaconing, interference, jamming, interception (MIJI) and other changes in enemy electromagnetic activity as prelude to offensive operations.

c) DS FA battalion S2 and intelligence section update intelligence products. [ARTEP 6-115-MTP, Task 06-3-01-2510, 2511]

- (1) Intelligence estimate (may or may not be in written form).
- (2) Situation template (SIT TEMP).
- (3) Event template.
- (4) Modified combined obstacle overlay (MCOO) in coordination with the DS FA battalion S3.
- (5) Intelligence portion of the decision support template (DST).
- (6) Intelligence collection plan.
- (7) Database.
- (8) Enemy order of battle (OB).
- (10) DS FA battalion INTSUMs.
- (11) Intelligence journal/log.
- (12) Periodic intelligence updates to battery commanders. [FN-NTC]

2b2 The DS FA battalion S3 and operations section evaluate operational information and update operational products. [ARTEP 6-115-MTP, Task 06-3-01-2110, 2120, 2150]

a) The DS FA battalion S3 and operations section evaluate information. [ARTEP 6-115-MTP, Task 06-3-01-2120]

- (1) Evaluate changes to guidance, direction, and information from the brigade commander or the DS FA battalion commander.
- (2) Evaluate information which confirms or refutes IPB information which may affect trigger events or the attack of HPTs.
- (3) Evaluate desired DS FA battalion endstates with what is possible based on current DS FA battalion level of preparation, FA support plan, and trends.
 - (a) Battery status.
 - (b) CSS status.
- (4) Evaluates impact of changes to the brigade maneuver plans on the FA support plan.
- (5) Evaluates changes to reinforcing unit plans which might affect DS FA battalion operations.
- (6) Evaluates DS FA battalion OPSEC based on information received from brigade and internal DS FA battalion sources.
- (7) Evaluate information received from the force artillery HQ or GS/GSR units.
- (8) Evaluate radar cueing plan, call for fire zone, friendly fire zones, and artillery target intelligence zones.

- b) The DS FA battalion S3 and operations section update operations products. [ARTEP 6-115-MTP, Task 06-3-01-2110, 2120, 2150]
- (1) Operational portion of the DST.
 - (2) Synchronization matrix.
 - (3) Operational graphics.
 - (4) MCOO based on input from the DS FA battalion S2 and CMLO.
 - (5) "Running" operations estimate (may or may not be in written form).
 - (6) DS FA battalion status boards and charts which track combat power and preparation status.
 - (7) Timeline of DS FA battalion preparations for battle.
 - (8) DS FA battalion operations journal/log.
 - (9) FA support plan products.
- 2b3 The DS FA battalion FDO and FDC section evaluate information and update FDC products. [ARTEP 6-115-MTP Task 06-3-02-2340, 3000, 2340, 2350]
- a) DS FA battalion fire direction officer (FDO) and FDC section evaluate information. [ARTEP 6-115-MTP, Task 06-3-02]
- (1) Evaluate changes to commander's criteria (IFSAS and AFATDS input).
 - (2) Evaluate need to update initialization data based on changes to firing parameters.
 - (3) Evaluate refinements and changes from all FSO/FSEs.
 - (a) Fire plans.
 - (b) Target lists.
 - (c) Schedules of fires.
 - (d) FSCM.
 - (e) Target analyses.
 - (f) Locations of friendly units.
 - (g) No fire areas (NFA).
 - (4) Evaluate information from other staff officers.
 - (a) Status of surveys.
 - (b) Ammunition status.
 - (c) Availability of radar.
 - (5) Evaluate information and status of batteries.
 - (a) Units in ready to fire status.

- (b) Ammunition status.
 - (c) Latest meteorology message received.
 - (d) Requirements for registration.
- b) DS FA battalion FDO and FDC section update fire direction products.
 - (1) Situation map, FSCM, and location of friendly units.
 - (2) All initialization data; confirmation of positive check of firing data.
 - (3) All fire plans, schedules of fires, groups of fires, FPFs, and other defensive fires with most recent firing data.
- 2b4 Brigade FSO and FSE section evaluate information and update fire support products. [ARTEP 71-3-MTP, Task 71-3-9001, 9002]
 - a) Brigade FSO and FSE section evaluate information. [ARTEP 71-3-MTP, Task 71-3-9001/2,3]
 - (1) Changes to brigade and DS FA battalion guidance and direction.
 - (2) Desired brigade endstates with what is possible based on current fire support situation and trends.
 - (3) Changes to the brigade fire support plan to ensure synchronization with battalion TF fire support plans.
 - (4) Changes to FA task organization and locations of GS and GSR FA units.
 - (5) Information which confirms or refutes IPB information relative to achieving the brigade commander's intent.
 - (6) Changes to engineer FASCAM requirements on the fire support plan.
 - (7) Changes to Army aviation and Air Force requirements which cause refinements to the fire support plan.
 - (8) Restrictive fire control measures imposed by division or other headquarters.
 - (9) Terrain requirements for FA systems through coordination with brigade S3.
 - (10) NFAs.
 - (11) Changes to the situation which should lead to convening the targeting and Army airspace command and control (A2C2) teams.
 - b) Update fire support products. [ARTEP 71-3-MTP, Task 71-3-9002]
 - (1) Update fire support estimates (may or may not be in written form).
 - (2) Fire support execution matrix (FSEM).
 - (3) Target lists.
 - (4) HPT list.
 - (5) Fire support graphics.
 - (6) Priority targets.
 - (7) FSCMs.
 - (8) Observation plan.

- (9) Aviation plan (with brigade air liaison officer (ALO), brigade naval gunfire liaison officer (NGLO), and brigade Army Aviation LNO):
- (a) Airspace coordination area (ACAs).
 - (b) Suppression of enemy air defenses (SEAD).
- 2b5 The DS FA battalion RSO evaluates information and updates DS FA battalion survey products. [ARTEP 6-115-MTP, Task 06-8-02-2700]
- a) The DS FA battalion RSO evaluates information. [ARTEP 6-115-MTP, Task 06-8-02-2700]
 - (1) Changes to guidance and direction, information, and priorities from the DS FA battalion S3.
 - (2) Desired DS FA battalion endstates with what is possible based on current survey situation and trends.
 - (3) Changes to FA task organization to determine impact on survey plan.
 - b) The DS FA battalion RSO updates survey products.
 - (1) Updates survey estimate (may or may not be in written form).
 - (2) Survey plan.
- 2b6 The DS FA battalion CMLO evaluates information and updates DS FA battalion NBC products. [ARTEP 3-117-40-MTP, Task 3-4-0003, 0004, 0007, 0017]
- a) The DS FA battalion CMLO evaluates information. [ARTEP 3-117-40-MTP, Task 3-4-0004, 0007]
 - (1) Changes to guidance and direction and information from the DS FA battalion S3.
 - (2) Desired DS FA battalion endstates with what is possible based on current NBC situation and trends.
 - (3) Information which confirms or refutes IPB information relative to achieving the DS FA battalion commander's intent.
 - (4) Answers to intelligence queries which alter initial assessment of enemy NBC capabilities.
 - (5) Adjustments to plans from subordinate units which affect DS FA battalion NBC plans.
 - (6) Changes to divisional defensive NBC capabilities.
 - b) The DS FA battalion NBC section updates NBC products. [ARTEP 3-117-40-MTP; Task 3-4-0003]
 - (1) Updates NBC estimate (may or may not be in written form).
 - (2) Mission oriented protective posture (MOPPP) analysis.
 - (3) Enemy NBC capabilities.
 - (4) NBC equipment and supplies inventories.
 - (5) NBC overlays and graphics.
 - (6) MCOO with contaminated areas.

- 2b7 The DS FA Bn SO and communications section evaluate information and update DS FA battalion communication products. [ARTEP 6-115-MTP, Task 06-5-02-4000, 06-1-01-4100]
- a) The Bn SO and communications section evaluate information.
- (1) Changes to DS FA battalion commander's guidance, direction, and information.
 - (2) Desired DS FA battalion endstates with what is possible based on current communication situation and trends.
 - (3) Information which confirms or refutes IPB information relative to achieving the DS FA battalion commander's intent.
 - (4) Answers to intelligence queries which alter initial estimate of enemy electronic and communications capabilities.
 - (5) Adjustments to plans from DS FA battalion CPs and subordinate units on DS FA battalion communications planning.
 - (6) Results of communications checks.
- b) The DS FA battalion communications section updates communications products.
- (1) Updates signal estimates (may or may not be in written form).
 - (2) Communications network overlay, area coverage overlay, and dead space overlay.
 - (3) SOIs.
- 2b8 All DS FA battalion CSS officers (XO, S1, S4, surgeon) evaluate information and update CSS products. [FM 63-20, Chap 3 and 6; FM 6-20-1, Chap 7; ARTEP 6-115-MTP, Task 06-3-01-2170, 12-1-C404, 06-3-01-6430, 08-3-C002, 06-3-01-6300]
- a) The DS FA battalion CSS officers evaluate information.
- (1) The DS FA battalion S1 and section evaluate information.
 - (a) Changes in guidance, direction, and orders from the DS FA battalion commander.
 - (b) Desired DS FA battalion endstate with what is possible based on personnel status.
 - (c) Personnel reports from the batteries to determine changes to combat power and troops available that impact on DS FA battalion commander's assessment.
 - (d) Personnel assignment priorities relative to meeting DS FA battalion commander's intent.
 - (e) Casualty reporting procedures to ensure timely replacement of personnel.
 - (f) Postal operations to ensure that mail is distributed to assigned personnel and to those attached to brigade elements (FSOs, FISTs, COLTs).
 - (2) The DS FA battalion S4 and S4 section evaluate information.
 - (a) Changes to DS FA battalion commander's guidance, direction, and information.

- (b) Logistics reports from the batteries on all classes of supply.
- (c) Evaluate trains concept, organization, and location for ability to provide support to meet commander's intent and support the tactical plan. [ARTEP 6-115-MTP, Task 06-2-01-6000/2]
- (d) Evaluate DS FA battalion supply operations for ability to support DS FA battalion commander's intent. [ARTEP-6-115-MTP, Task 06-3-01-6430]
 - 1 Priority distribution.
 - 2 Availability and stockage levels of petroleum, oils, and lubricants (POL) products.
 - 3 Status requirements and other information input from FSB.
- (e) Availability of ground transport assets.
- (f) Availability of air transport assets.
- (3) The DS FA battalion maintenance officer and maintenance section evaluate information: [ARTEP 6-115-MTP, Task 06-3-01-6300, 06-2-01-6000]
 - (a) Priorities for evacuation and repair of damaged equipment as directed by the DS FA battalion commander.
 - (b) On-hand CL IX, available supply list (ASL), and prescribed load list (PLL) stockage levels.
 - (c) Time projections for repair and return of critical combat vehicles (howitzers, ammunition vehicles, and FIST vehicles).
- (4) The DS FA battalion ammunition officer and ammunition section evaluate information: [ARTEP-6-115-MTP, Task 06-3-01-2170, 06-3-02-6500]
 - (a) On-hand quantities and anticipated requirements for CL V as reported by the batteries in coordination with the DS FA battalion S3.
 - (b) Need for prepositioned stocks or special ammunition for operation to meet commander's intent.
- (5) The DS FA battalion surgeon/physician's assistant (PA) and medical section evaluate information. [ARTEP-6-115-MTP, Task 06-3-01-6810]
 - (a) Changes in direction or guidance from the DS FA battalion commander.
 - (b) Evacuation plan and health services plan for adequacy to meet the commander's intent.
 - (c) Current state of health of the command.
- b) The DS FA battalion CSS officers update CSS products.
 - (1) DS FA battalion S1 section updates personnel information. [ARTEP 6-115-MTP, Task 12-1-C404]
 - (a) Updates personnel services estimate (may or may not be in written form).
 - (b) Personnel status of subordinate and supported units.
 - (c) Casualty feeder reports.

- (2)
 - (d) Personnel priorities as directed by the DS FA battalion commander.
DS FA battalion S4 and S4 section update logistical information. [ARTEP 6-115-MTP, Task 06-3-01-6430]
 - (a) Supply and transportation portions of updated logistics estimates (may or may not be in written form).
 - (b) Supply:
 - 1 Percent fill of combat basic loads.
 - 2 Configuration and location of immediate and emergency resupply (CL III and V) loads and push packages.
 - 3 Adequacy of CSS supply assets.
 - 4 Supply priorities as directed by the DS FA battalion commander.
 - 5 Establishment and fill of stockpiles and caches.
 - (c) Transportation:
 - 1 Schedules and priorities.
 - 2 Status of supplies, equipment, and materials requiring transport.
 - 3 Status of logistics packages (LOGPAC).
 - 4 Transportation recovery and back-haul plans.
 - 5 Main supply route (MSR) and alternate supply route (ASR) traffic and route conditions.
- (3) The DS FA battalion maintenance officer (BMO) and maintenance section update maintenance information:
[ARTEP 6-115-MTP, Task 06-3-01-6300]
 - (a) Number and type of equipment systems on hand and operational.
 - (b) Systems which are non-mission capable and repairable.
 - (c) Projections for repair and return of systems and other essential equipment.
 - (d) CL IX, ASL, and PLL stockage levels.
 - (e) Maintenance priorities and guidelines as directed by the DS FA battalion commander.
- (4) The DS FA battalion ammunition officer and ammunition section update information. [ARTEP 6-115-MTP, Task 06-3-01-2170, 06-3-02-6500]
 - (a) Percent fill of combat basic loads.
 - (b) Configuration and location of immediate and emergency resupply loads.
 - (c) Establishment and fill of stockpiles and caches.
 - (d) Ammunition lots and types of propellants available (e.g., white-bag vs. green-bag, availability of rocket assisted projectile (RAP)).
- (5) The DS FA battalion surgeon updates medical information. [ARTEP 6-115-MTP, Task 08-3-C0002]
 - (a) Medical evacuation capabilities.

- (b) CL VIII stocks and resupply availability.
 - (c) Reinforcement and reconstitution of medical assets.
 - (d) Disposition and capability of DS FA battalion medical assets.
 - (e) Medical priorities as directed by the DS FA battalion commander.
 - (f) Update all ambulance exchange points (AXPs) and battalion aid stations, and coordinate for external support.
- 2b9 The HHB commander evaluates information and updates products/assessments.
- a) Capability to move, secure, and support the DS FA battalion CPs.
 - b) Assessment of capabilities versus requirements to move, secure, and support the DS FA battalion TOC/ALOC to the DS FA battalion S3.
- 2c. The DS FA battalion CPs maintain status. [FM 6-20-1, pp. 3-1 - 3-6]
- 2c1 DS FA battalion TOC maintains status. [FM 6-20-1, pp. 3-1 - 3-6]
- a) Information which supports the DS FA battalion commander's CCIR.
 - b) Current and projected combat power status of subordinate units (e.g., green-amber-red).
 - c) Current operations and intelligence map.
 - (1) Operations overlay (maneuver units in brigade sector, boundaries, all fire support units in brigade sector).
 - (2) Intelligence overlays such as:
 - (a) Situation template overlay.
 - (b) Event template overlay.
 - (3) MCOO.
 - (4) Fire support overlay.
 - (5) Position area overlay.
 - (6) NBC overlay.
 - (7) CSS overlay.
 - (8) Disposition of collection assets/target acquisition overlay.
 - (9) Information on external units conducting reconnaissance and surveillance (R&S) operations to prevent fratricide.
 - (10) Dispositions and status of patrols and other R&S and security forces.
 - (11) Other decision aids and charts as required such as:

- (a) DST.
 - (b) Synchronization matrix.
 - (c) FSEM.
 - (12) Current assessment of effectiveness of fires (e.g., BDA). [FN-NTC]
 - (13) FSCM including ACAs.
 - Status of key communications links.
 - Status of preparation activities to ensure compliance with stated mission timelines.
 - Plans map (with overlays for future operations).
 - Journals/logs.
- d)
- e)
- f)
- g)
- 2c2 DS FA battalion ALOC maintains status. [FM 6-20-1, Chap 7]
- a)
- Current operations and intelligence map.
 - (1) Operations overlay (DS FA battalion, higher and adjacent units).
 - (2) Rear operations, security, and threat overlay.
 - (3) Intelligence situation overlay.
 - (4) Situation template overlay.
 - (5) Event template overlay.
 - (6) MCOO.
 - (7) Fire support overlay.
 - (8) CSS situation map and overlays.
 - (a) MSR and ASR.
 - (b) CSS locations, current and projected.
 - (c) Decontamination sites.
 - (d) Ambulance exchange points (AXPs).
- b)
- Decision aids and charts to assist in maintaining status such as:
- (1) DST.
 - (2) Synchronization matrix.
 - (3) Current and projected personnel and equipment status.
 - (a) Personnel strength.
 - (b) Operational equipment strength.
 - (c) Status of supplies.
 - (d) Casualties.

- (e) Replacement personnel status/location.
- (f) Damaged and non mission capable (NMC) vehicles and equipment.
- (4) CSS staff journal.

2c3 The DS FA BSOC maintains status:

- a) Current operations and intelligence map.
 - (1) Operations overlay (DS FA battalion, brigade and adjacent units).
 - (2) Rear operations, security, and threat overlay.
 - (3) Intelligence overlay.
 - (4) Situation template overlay.
 - (5) Event template overlay.
 - (6) CSS situation map and overlays.
 - (a) MSR and ASR.
 - (b) CSS locations, current and projected.
 - (c) Decontamination sites.
 - (7) Location and evacuation of EPW and their equipment.
 - (8) Location and evacuation of displaced persons.
- b) Decision aids, charts, and status boards to assist in maintaining status such as:
 - (1) DST.
 - (2) Synchronization matrix.
 - (3) Current and projected personnel and equipment status.
 - (a) Personnel strength.
 - (b) Operational equipment strength.
 - (c) Status of supplies.
 - (d) Casualties.
 - (e) Replacement personnel.
 - (f) Damaged and NMC vehicles and equipment.
 - (4) Status of key communications links.
 - (5) CSS staff journal.

3. The direct support field artillery battalion commander visualizes the battlefield. [TRADOC Pam 11-9, Chap 7 and App D]

3c. The DS FA battalion commander anticipates future requirements and actions (sequels) based on his projection of the outcome of the current mission. [FM 101-5, pp. 1-15, 4-46, and App C]

3c2 Mission.

- a) The brigade and division commanders' intents are continuously reviewed for probable mission changes.
- b) Friendly capabilities and templated/anticipated enemy capabilities are compared to determine projected endstates and probable future plans.
- c) Branches, sequels, and alternative COAs for the current mission are reviewed to determine potential for future planning.
- d) Risk criteria are reassessed.
- e) On-order missions of artillery units in sector are reviewed.

3c3 Enemy.

- a) Satisfied PIR, IR, and other intelligence information are reviewed for deviations from original templated enemy action; examples:
 - (1) Enemy's course of action is not as anticipated.
 - (2) Confirmed enemy strength and dispositions are not the same as templated and predicted.
 - (3) The DS FA battalion commander may adjust PIR and IR.
 - (4) The DS FA battalion commander decides whether there is need to change designation of NAIs, TAIs, and HPTs.
- b) SIT TEMP and event templates are updated and assessed to appraise the DS FA battalion's posture to meet newly identified potential situation.
- c) HPTs are updated, and the attack-guidance matrix (AGM) and the DST are integrated based on changes to the enemy situation.

3c4 Troops.

- a) Future mission capability of subordinate units is projected.
 - (1) Combat power, current and projected, required to achieve new or previously unidentified tasks.
 - (2) Projected equipment and personnel status.
 - (3) Ability to move, emplace, and fire based on changes to terrain factors.
 - (4) Capability to range critical targets and mass fires as required to meet new conditions or missions.

- (5) Projected force ratios of friendly forces are compared to updated enemy force capabilities to assess the DS FA battalion's ability to achieve desired endstate and meet future requirements.
- (6) Projected ammunition status based on available supply rate (ASR)/controlled supply rate (CSR) and ability to resupply.
- (7) Target acquisition capability available in the brigade sector.
- (8) On-order missions and positioning of artillery units.
- (9) Risk to mission accomplishment and safety hazards.

3c5 Terrain.

- a) Impact of terrain factors in and around the proposed firing positions.
- b) Impact of projected weather.
- c) Ability to range projected HPTs with the predominant propellant available.
- d) Deconfliction of available terrain with brigade XO.

3c6 Time.

- a) Projections of time available versus time required to meet new mission requirements.
- b) Changes to mission timelines necessitated by enemy activities.

5. **The direct support field artillery battalion commander directs and leads subordinate forces.** [TRADOC Pam 11-9, Chap 7 and App D]

5e. The DS FA battalion commander ensures that each BOS is integrated with other BOS during visits, backbriefs, and rehearsals. [FM 101-5, pp. H-36 - H-42]

5e1 The DS FA battalion commander determines the state of DS FA battalion preparedness through visits and inspections. [Battle Command, p. 10-15]

- a) The DS FA battalion commander personally visits and inspects units.
 - (5) When actions taken are not in accordance with decisions, standing operating procedures (SOPs), Army standards, and the operations order (OPORD), refines plans and preparation efforts to counter weaknesses.

Component C: Commander and staff monitor adherence to timelines and quality of battle preparation.

1. The direct support field artillery battalion command posts and staff manage and maintain command, control, and communications.

1a. Battalion CPs manage means of communicating information. [FM 101-5, Chap 6 and App B, L; ARTEP 6-115-MTP, Task 06-3-01-2150, 2160, 2120]

1a1 The DS FA battalion commander appoints an "information manager" from the staff (usually the battalion S3) to: [FM 101-5, Chap 6 and App B]
c) Establish and enforce timelines.

1a2 The DS FA battalion XO, as primary logistician:

NOTE: The DS FA battalion XO is the second in command of the DS FA battalion. He is the senior staff officer of the unit and serves as the primary logistician. He must position himself, based on the location of the DS FA battalion commander, where he can best perform either function (e.g., when the DS FA battalion commander is with the brigade commander and staff, the XO may devote more of his time in his role as second in command). [FM 6-20-1, p. 3-4]

- a) Supervises the activities of the DS FA battalion CSS staff.
- b) Ensures that DS FA battalion units are logistically sustained.

1a3 The DS FA battalion assistant S3 manages the operations of the DS FA battalion tactical operations center (TOC) and the operations section when the DS FA battalion S3 is not available. [FM 6-20-1, p. 3-2]
c) Enforces timelines.

1a7 All DS FA battalion CPs ensure that information on the situation is communicated between staff officers during shift changes. [FM 71-3, p. 3-25]

- a) Enemy activities.
- b) Status of subordinate units.
- c) Ongoing staff actions which must be monitored, tracked, and completed.
- d) Timelines and suspenses which must be met.
- e) Planning for future missions.

2. **Direct support field artillery battalion command posts acquire, evaluate, and communicate information and maintain status.** [TRADOC Pam 11-9, Section IV; "Battle Command," pp. 43, 65; ARTEP 6-115-20-MTP, Task 06-3-02-1100; FM 34-130, Chap 2; FM 6-20-40, Chap 2; FM 101-5, Chap 3, 5, App J]
 - 2a. The DS FA battalion staff officers acquire information. [TRADOC Pam 11-9, Chap 7 and App D]
 - 2a3 All DS FA battalion staff officers, LNOs, and subordinate leaders obtain information; they commonly: [FM 101-5, pp. 3-84, C-4, Chap 6, App A]
 - b) Obtain information relevant to fulfilling their areas of responsibility for the DS FA battalion's preparations for battle in order to: [FM 101-5, pp. 6-33, 6-34]
 - (1) Monitor and modify preparation activities as necessary.
 - (2) Keep the commander informed of factors impacting on his ability to perform his role as DS FA battalion commander or FSCCOORD for the brigade.
 - c) Provide updates to the DS FA battalion commander on their functional areas. [FM 101-5, pp. 6-33, C-2]
 - d) Continually coordinate with each other personally and with external headquarters to obtain information which includes: [FM 101-5, p. 3-84, App A]
 - (2) Updates/modifications of CCIR as directed by the DS FA battalion commander during:
 - (a) Rehearsals.
 - (b) Backbriefs.
 - (c) Commander visits.
- 2a6 DS FA battalion S3 section obtains operations information (i.e., changes to METT-T and status of battlefield operating systems [BOS]). [FM 101-5, pp. C-8, C-9]
 - b) From subordinates units including: [ARTEP 6-115-MTP, Task 06-3-01-2110, 2150]
 - (2) Status of preparations.
 - (5) Recommendations for changes to the DS FA battalion plan based on their current and projected status.
 - c) From other staff officers and LNOs. [ARTEP 6-115-MTP, Task 06-3-01-2120; FM 101-5, App A]
 - (2) Updates from DS FA battalion S1/S4.
 - (a) Personnel and unit status.
 - (b) Vehicle and equipment status.
 - (c) Status of all classes of supply.
 - (3) Updates from brigade FSE.

- (4) Updates from DS FA Bn SO on the status of DS FA battalion communications links and systems.
- (5) Updates from CMLO on the status and planned employment of chemical units.

2a7 The DS FA battalion FDC section obtains information to include: [ARTEP 6-115-MTP, Task 06-3-02-2320; FM 6-20-1, p. 3-3; FM 6-40]

- c) Changes from the brigade FSO, DS FA battalion S3, and battalion FSOs to preplanned and scheduled fires.
- e) Changes to firing parameters (requirements for accurate predicted fires).
 - (1) Accurate target location and size.
 - (2) Accurate firing unit location.
 - (3) Weapon and ammunition information.
 - (4) Met information.
 - (5) Computational procedures.
- f) Updated information from battery FDCs.

2a8 The brigade FSCoord, brigade FSO, and FSE section obtain fire support information. [FM 6-20, pp. 2-22, 2-23; FM 6-20-40, Chap 4; ARTEP 71-3-MTP, Task 9002/1b, 3, 9003/1a, 9004/1a]

- c) Field artillery status from DS FA battalion S3.
 - (1) Current and projected locations of units.
 - (2) Current and projected unit weapons status.
 - (3) Current and projected ammunition status.
- e) Task organization, personnel and equipment status, and status of preparations from battalion TF FSOs.
 - (1) COLTs.
 - (2) FISTs.
 - (3) Mortars.
 - (a) Mortar tubes and vehicles.
 - (b) Personnel.
 - (c) Locations of sections and FDCs.
 - (d) Ammunition status.
 - (4) Ammunition types.
 - (5) Ammunition quantities.
- f) Bottom-up refinements regarding projected locations, targets, and timelines from:
 - (1) Refinement of battalion TFs fire plans and target lists.

- (2) Refinement of intelligence information from scout platoons.
 - (3) COLTs and other observers.
 - (4) Refinement of data for FPFs.
 - (5) FSCM.
 - g) Availability and locations of EW assets from DS FA battalion S2.
 - h) Information necessary to refine plans for coverage of obstacles and adjustments to FASCAM employment from the brigade engineer.
- 2a9 The DS FA battalion RSO obtains information concerning the DS FA battalion survey operations. [ARTEP 6-115-MTP Task 06-8-02-2700; FM 6-2, pp. 15-13, 14]
- c) Information from DS FA battalion S3.
 - (1) Status of movement planning that may affect survey operations.
 - d) Status of survey teams:
 - (1) Equipment.
 - (2) Personnel.
 - (3) Response to timelines.
- 2a10 The DS FA battalion CMLO obtains information concerning friendly and enemy NBC status. [ARTEP 6-115-MTP, Task 03-3-C201, C202]
- c) Status and location updates for NBC equipment and supplies from subordinate units and DS FA battalion S4.
 - d) Status and location of decontamination and reconnaissance assets from brigade CMLO.
 - g) Changes to brigade and subordinate units' plans in terms of projected locations, decontamination requirements, and timelines.
- 2a11 The DS FA battalion communications section obtains information concerning DS FA battalion communications requirements and capabilities. [ARTEP 6-115-MTP, Task 06-8-01-4000, 06-7-01-4800, 06-1-01-4100]
- b) Status of communications links from DS FA battalion CPs to brigade main and tactical command post (TAC CP), battalion TF FSO/FIST/COLT, DIVARTY, reinforcing units, and other major subordinate command (MSC) CPs.
 - c) Updates from subordinate units on communications status.
 - (1) Status of communications links from DS FA battalion CPs to Btry/Plt FDCs.
 - (2) Operational status of equipment (secure and non-secure, digital and voice).
 - (3) Signal operating instructions (SOIs).

- (4) Availability of subordinate unit communications personnel and equipment.
 - e) Status reports from retransmission stations.
 - (1) Positioning.
 - (2) Equipment serviceability and capability.
 - (3) Communication ranges and dead spaces.
 - f) Information from the DS FA battalion XO and S3 about changes to proposed DS FA battalion CP locations and projected timelines.
 - g) Changes to battalion TF and subordinate units' plans in terms of projected locations and timelines.
- 2a13 The DS FA battalion S4 section obtains information. [ARTEP 6-115-MTP, Task 06-3-01-6430; FM 101-5, p. C-9; FM 6-20-1, pp. 7-10, 7-11]
- c) Logistics reports from subordinate and supporting units.
 - (1) Status of supplies.
 - (2) Equipment readiness.
 - (3) Task organization and status of CSS elements:
 - (a) Field trains.
 - (b) Combat trains.
- 2a14 The DS FA battalion surgeon obtains information. [ARTEP 6-115-MTP, Task 08-3-C003; FM 6-20-1, p. 7-23, 7-24]
- f) Supporting unit medical support status.
 - (1) Positioning and readiness of medical assets.
 - (2) Capability to receive, triage, and evacuate casualties.
 - g) Changes to supporting unit plans in terms of projected locations and times.
- 2a16 The HHB commander obtains information necessary to support the TOC and the ALOC. [FM 6-20-1, pp. 3-1, 3-6, 7-1, 7-10]
- c) Obtains anticipated movement times and projected locations for the CP and combat trains from the DS FA battalion XO and S3.
 - d) Obtains information from attachments/supporting agencies concerning space, supply, and support requirements.
- 2c. The DS FA battalion CPs maintain status. [FM 6-20-1, pp. 3-1 - 3-6]
- 2c1 DS FA battalion TOC maintains status. [FM 6-20-1, pp. 3-1 - 3-6]

- a) Information which supports the DS FA battalion commander's CCIR.
 - b) Current and projected combat power status of subordinate units (e.g., green-amber-red).
5. **The direct support field artillery battalion commander directs and leads subordinate forces.** [TRADOC Pam 11-9, Chap 7 and App D]
- 5e. The DS FA battalion commander ensures that each BOS is integrated with other BOS during visits, backbriefs, and rehearsals. [FM 101-5, pp. H-36 - H-42]
- 5e1 The DS FA battalion commander determines the state of DS FA battalion preparedness through visits and inspections. [Battle Command, p. 10-15]
- a) The DS FA battalion commander personally visits and inspects units.
 - (1) Manages his time and prioritizes his visits so that he visits at least those units most critical to the execution of his intent and concentrates on those units and officers that demonstrate leadership weaknesses; assesses unit capabilities; checks/listens to be sure tasks are understood.
 - (2) Questions subordinate leaders down to section level and compares their concepts of the operation with his to ensure that the DS FA battalion plan is understood at all levels.
 - (3) Inspects and spot-checks known weaknesses to ensure that they are corrected.
 - (4) Makes a subjective assessment of cohesion, morale, and esprit.
 - (5) When actions taken are not in accordance with decisions, SOPs, Army standards, and the OPORD, refines plans and preparation efforts to counter weaknesses.
 - b) The DS FA battalion commander extends his command presence by directing members of his staff (DS FA battalion XO, CSM, or one or more DS FA battalion staff members) to perform inspections and visits.

OUTCOME 3 ASSESSMENT

OUTCOME 3: Tactically sound recommendations are developed and critical information is communicated by the battalion staff and subordinate leaders. (Use Tables 5, 6, 7, and 8)

Component A: Staff and subordinate leaders provide critical information.	Adequate	Marginal	Not Adequate
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Assessment Statements

- The DS FA Bn commander provides critical information on fire support to the brigade commander in his capacity as brigade FSCCOORD.
- DS FA Bn staff officers, LNOs (to include brigade FSO/FSE and TF FSOs), and subordinate leaders immediately communicate any response to CCIR to DS FA Bn commander and S3.
- All DS FA Bn staff officers and LNOs (to include brigade FSO/FSE and TF FSOs) pass critical information to other staff officers and LNOs who require the information as soon as the information is received.
- The DS FA Bn S3 manages information flow and establishes a system to keep the DS FA Bn commander informed.
- The DS FA Bn S2 keeps the DS FA Bn commander updated with accurate information on enemy situation and capabilities and on changes to terrain conditions.

Component B: Staff and subordinate commanders provide tactically sound recommendations.	Adequate	Marginal	Not Adequate
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Assessment Statements

- The DS FA Bn commander provides tactically sound recommendations on fire support to the brigade commander in his capacity as brigade FSCoord.
- DS FA Bn staff officers and LNOs (to include FSO/FSE and TF FSOs) provide appropriate recommendations to the commander regarding their functional areas.
- DS FA Bn staff officers and LNOs (to include FSO/FSE and TF FSOs) provide appropriate recommendations to each other.
- DS FA Bn staff officers obtain recommendations from subordinate leaders on changes to the DS FA Bn plan based on their current and projected status.

OUTCOME 3 DIAGNOSTIC AID

OUTCOME 3: Tactically sound recommendations are developed and critical information is communicated by the battalion staff and subordinate leaders.

Task Elements

Component A: Staff and subordinate leaders provide critical information.

1. The direct support field artillery battalion command posts and staff manage and maintain command, control, and communications.

1a. Battalion CPs manage means of communicating information. [FM 101-5, Chap 6 and App B, L; ARTEP 6-115-MTP, Task 06-3-01-2150, 2160, 2120]

1a4 DS FA battalion S3 directs staff meetings: [AN]

- a) Ensures that each staff officer disseminates information which is relevant to the entire staff.
- b) Appraises completeness of information.
- c) Identifies information gaps and directs actions to fill them.

1a7 All DS FA battalion CPs ensure that information on the situation is communicated between staff officers during shift changes. [FM 71-3, p. 3-25]

- a) Enemy activities.
- b) Status of subordinate units.
- c) Ongoing staff actions which must be monitored, tracked, and completed.
- d) Timelines and suspenses which must be met.
- e) Planning for future missions.

1a9 DS FA battalion S3 at the DS FA battalion TOC manages communication: [ARTEP 6-115-MTP, Task 06-06-3-01-2120; FM 6-20-1, pp. 6-7 - 6-21]

- a) Facilitates control and coordination for the DS FA battalion commander through communication with subordinate, adjacent, and supporting elements.

- b) Passes processed information and keeps the DS FA battalion commander updated on new information through concise, consolidated updates.
2. **Direct support field artillery battalion command posts acquire, evaluate, and communicate information and maintain status.** [TRADOC Pam 11-9, Section IV; "Battle Command," pp. 43, 65; ARTEP 6-115-20-MTP, Task 06-3-02-1100; FM 34-130, Chap 2; FM 6-20-40, Chap 2; FM 101-5, Chap 3, 5, App J]
- 2a. The DS FA battalion staff officers acquire information. [TRADOC Pam 11-9, Chap 7 and App D]
 - 2a2 The DS FA battalion S3 manages the flow of information in the DS FA battalion TOC and establishes a system to keep the DS FA battalion commander informed. [FM 101-5, pp. 6-2, 6-11, 6-34; ARTEP 6-115- MTP, Task 06-3-01-2110]
 - 2a3 All DS FA battalion staff officers, LNOs, and subordinate leaders obtain information; they commonly: [FM 101-5, pp. 3-84, C-4, Chap 6, App A]
 - a) Focus information collection according to CCIR and staff information requirements relevant to their areas of responsibility and immediately communicate any response to CCIR to the DS FA battalion commander, XO, and S3. Information required by other staff officers is passed directly to them. [FM 101-5, pp. 6-8, 6-11, 6-16, and C-4]
 - b) Obtain information relevant to fulfilling their areas of responsibility for the DS FA battalion's preparations for battle in order to: [FM 101-5, pp. 6-33, 6-34]
 - (2) Keep the commander informed of factors impacting on his ability to perform his role as DS FA battalion commander or FSCoord for the brigade.
 - d) Continually coordinate with each other personally and with external headquarters to obtain information which includes: [FM 101-5, p. 3-84, App A]
 - (1) Specific information requirements, e.g., information to assist the DS FA battalion S2 with refinement of the DS FA battalion intelligence preparation of the battlefield (IPB); information to assist the DS FA battalion S3 regarding units' requirements for use of terrain in the brigade area.
 - (2) Updates/modifications of CCIR as directed by the DS FA battalion commander during:
 - (a) Rehearsals.
 - (b) Backbriefs.
 - (c) Commander visits.

- 2b. The DS FA battalion CPs evaluate acquired information and update products. [FM 6-20-1 p. 3-1; FM 101-5, Chap 6; ARTEP 6-115-MTP, Task 06-1-02-2500]
- 2b1 The DS FA battalion S2 and intelligence section evaluate intelligence information and update IPB products. [ARTEP 6-115-MTP, Task 06-1-02-2500]
- 2d. The DS FA battalion CPs and staff communicate information. [FM 6-20-1, pp. 3-1 - 3-3; FM 6-20-40, p. 26; FM 6-20-50, App C; FM 101-5, Chap 5 and 6, App A, B and L; FN-NTC]
- 2d1 All CPs and staff disseminate information. [FM 6-20-1, pp. 3-1 - 3-3]
- a) Provide briefings to the DS FA battalion commander on the status of mission preparedness.
 - b) Each staff representative communicates critical information needed to:
 - (1) Coordinate DS FA battalion actions and plans.
 - (2) Monitor the situation.
 - (3) Direct DS FA battalion actions.
 - c) All staff officers remain alert for and ensure that critical information they receive is passed to other staff officers who require the information as soon as it is received.
 - d) All staff officers and subordinate commanders develop and make appropriate recommendations about mission preparation to battalion S3, XO, or commander.
- 2d2 The DS FA battalion S2 section communicates enemy's situation, evaluations of enemy capabilities, and analyses of PIR, IR, and routine information to: [ARTEP 6-115-MTP, Task 06-3-01-2511]
- a) Brigade and DIVARTY S2.
 - b) Reinforcing unit S2s.
 - c) DS FA battalion TOC.
 - d) DS FA battalion ALOC.
 - e) The brigade FSO/targeting officer.
 - f) Subordinate batteries. [FN-NTC]
- 2d3 The DS FA battalion S3 and operations section communicate operational information. [ARTEP 6-115-MTP, Task 06-3-01-2120, 2150]
- a) Examples:

- (1) WARNOs/FRAGOs.
- (2) Coordinating instructions.
- (3) Reports of the DS FA battalion situation.
- (4) Evaluations of DS FA battalion state of preparedness.
- (5) Answers to CCIR and IR.

b) To: [FM 101-5, App A]

- (1) DS FA battalion commander.
- (2) DS FA battalion XO.
- (3) DS FA battalion staff.
- (4) Batteries and reinforcing units.
- (5) DS FA battalion ALOC.
- (6) Brigade FSO.
- (7) Brigade TAC CP.

- 2d4 The DS FA battalion FDO and FDC section disseminate the fire plan, target lists, support geometry, attack criteria, subscriber tables, and instructions for degraded operations and continuous operations (CONOPS) to all subordinate and supporting units.
- 2d5 The brigade FSO, targeting officer and FSE section communicate DS FA battalion fire support situation and analysis of CCIR, IR, and routine information. [FM 101-5, App A; ARTEP 71-3-MTP, Task 71-3-9002/2, 3]
- a) To: [FM 101-5, App A; MTP 71-3-9002/2, 3]
- (1) Assistant brigade engineer.
 - (2) Brigade S2.
 - (3) Brigade S3.
 - (4) DIVARTY S3.
 - (5) Division FSE.
 - (6) DS FA battalion S3.
 - (7) Subordinate battalion TF FSOs.
 - (8) Brigade ALO, NGLO and Army aviation LNO.
 - (9) FSB commander or brigade officer responsible for rear operations.
 - (10) DS FA battalion staff officers who need the information.
- b) The brigade FSO and FSE section coordinate with adjacent and higher FSEs and DS FA battalion TOC to ensure that: [ARTEP 71-3- MTP, Task 71-3-9002/2]

- (1) Planned brigade fire support will not interfere with other fire support systems, will not disrupt adjacent unit operations, and will not jeopardize troop safety.
- (2) Fire support information and products (target lists, FSEM, close air support (CAS) requests, and air tasking order (ATO)) are exchanged and refined.
- c) The brigade FSO and FSE section coordinate with DS FA battalion S3 and TF FSOs to verify: [ARTEP 71-3-MTP, Task 71-3-3001/2]
- (1) Control measures delineating mutual boundaries.
- (a) Directed by division.
- (b) Internal boundaries (TFs, scouts, security forces).
- (2) Air space control measures.
- (3) Boundaries and fire support coordinating measures.
- (a) COLT/FIST no fire areas (NFAs).
- (b) Restrictive fire line (RFL).
- (4) Signals and conditions under which restrictive measures will be emplaced or lifted.
- 2d6 The DS FA battalion CMLO communicates the DS FA battalion NBC situation and analysis of CCIR, IR, and routine information. [FM 101-5, App A; ARTEP 3-117-40-MTP, Task 3-4-0007, 0009, 0016]
- a) To:
- (1) Brigade CMLO.
- (2) DS FA battalion subordinate commanders and leaders.
- (3) Supporting NBC units (e.g., decontamination, reconnaissance).
- (4) DS FA battalion staff officers who need the information.
- b) The DS FA battalion CMLO coordinates with the brigade CMLO and supporting decontamination units to confirm and organize deliberate decontamination plans and preparations. [ARTEP 3-117-40-MTP, Task 3-4-0005]
- 2d7 The Bn SO and communications section reports DS FA battalion communications situation and other routine information. [FM 101-5, App A; ARTEP 71-3-MTP, Task 71-3-1102/4]
- a) To:
- (1) Brigade signal officer.
- (2) DS FA battalion subordinate commanders and leaders.
- (3) DS FA battalion staff officers who need the information.
- b) The DS FA battalion communications section coordinates with adjacent units and brigade headquarters. [AN]

- (1) Confirms allocation and locations of signal assets and capabilities.
- (2) Acquire signal equipment to supplement DS FA battalion CPs and subordinate units which require special communications equipment.

2d8 DS FA battalion CSS officers report administrative and logistical situation and routine information to DS FA battalion staff and external sources.

a)

To:

- (1) DS FA battalion subordinate commanders and leaders.
- (2) Brigade S1, division (Div) AG, brigade S4, DMMC, and brigade surgeon.
- (3) FSB and MSB staffs.
- (4) DS FA battalion staff officers who need the information.

b) DS FA battalion CSS staff coordinates with DS FA battalion staff and DS FA battalion units: [FM 101-5, App A]

- (1) To identify additional requests for support.

- (a) Transportation assets.
- (b) Medical augmentation.

- (c) Repair of vehicles and weapons systems; recovery of damaged vehicles; transportation for return of repaired vehicles.

- (d) Supply support.

(2) To coordinate the transportation of supplies and cargo through DS FA battalion units.

(3) To coordinate routine, emergency, and critical resupply operations (e.g., delivery times, types, and quantities of supplies required).

(4) To coordinate receipt and processing of replacements.

(5) To track evacuation of personnel and casualties.

(6) To process awards, decorations, promotions, and legal actions.

(7) To coordinate for security protection and support in general of CSS units operating forward.

c) DS FA battalion S4 coordinates with the DS FA battalion S3 to deconflict terrain requirements and projected locations

for:

(1) Ammunition transfer points (ATPs).

(2) Ammunition supply points (ASPs).

(3) Forward arming and refuel points (FARPs).

d) DS FA battalion CSS staff performs coordination with FSB and supporting CSS headquarters: [FM 6-20-1, pp. 7-8-10]

- (1) To process requests for support of DS FA battalion.

- (a) Additional transportation assets.
- (b) Medical augmentation and support.
- (c) Support of resupply operations.
- (d) DS and GS maintenance support for vehicles and weapon systems; recovery of damaged vehicles and weapon systems; return of repaired vehicles and weapon systems.
- (2) DS FA battalion S4 coordinates the transportation of DS FA battalion supplies and cargo through adjacent units based on the locations of the BSA and other brigade or division supply points.
- (3) DS FA battalion S4 coordinates routine, emergency, and critical resupply of the DS FA battalion (e.g., delivery times, types, and quantities of supplies required).
- (4) DS FA battalion S1 receives and processes replacements.
- (5) DS FA battalion S1 tracks evacuation of personnel and casualties.
- (6) DS FA battalion S1 processes awards, decorations, promotions, and legal actions of DS FA battalion personnel.

3. **The direct support field artillery battalion commander visualizes the battlefield.** [TRADOC Pam 11-9, Chap 7 and App D]
- 3c. The DS FA battalion commander anticipates future requirements and actions (sequels) based on his projection of the outcome of the current mission. [FM 101-5, pp. 1-15, 4-46, and App C]
- 3c1 The DS FA battalion staff assists the DS FA battalion commander in his assessment of future requirements by providing information. [AN]
- 3e. The DS FA battalion commander informs the brigade commander of the results of his battalion assessment. [AN]
4. **The direct support field artillery battalion commander directs changes to the operation or plan.** [TRADOC Pam 11-9, Chap 7 and App D]
- 4b. The DS FA battalion commander conducts the MDMP in a time constrained environment. [FM 101-5, pp. 4-41 - 4-60]
- 4b1 The DS FA battalion staff provides information and recommendations as required.
- 4d. The DS FA battalion commander describes his revised concept to his staff. [FM 101-5, p. 4-49]

- 4d1 The DS FA battalion commander explicitly expresses COA concepts:
- a) Intent and desired endstate.
 - b) Concept of operations.
 - (1) Major components of maneuver.
 - (2) Integration of combat multipliers.
 - (3) Critical points and center of gravity.
 - c) Enemy COA(s) to be considered.
 - d) CCIR.
 - e) Limitations.
 - f) Risks.
- 4d2 The DS FA battalion commander provides the concept and guidance to the staff for detailed COA development and mission analysis.
- 4i. The DS FA battalion staff coordinates internally and with higher, adjacent, and supporting elements to coordinate and integrate the FRAGO. [FM 101-5, App B]
5. **The direct support field artillery battalion commander directs and leads subordinate forces.** [TRADOC Pam 11-9, Chap 7 and App D]
- 5b. The DS FA battalion commander and staff coordinate and integrate tactical operations through backbriefs. [FM 101-5, pp. 4-59, 4-60]
- 5b4 DS FA battalion staff disseminates information and changes which occur as a result of plan refinement.
- 5e. The DS FA battalion commander ensures that each BOS is integrated with other BOS during visits, backbriefs, and rehearsals. [FM 101-5, pp. H-36 - H-42]
- 5e1 The DS FA battalion commander determines the state of DS FA battalion preparedness through visits and inspections. [Battle Command, p. 10-15]
- a) The DS FA battalion commander personally visits and inspects units.
 - (7) Informs DS FA battalion XO and his representatives inspecting preparations of any changes or refinements to the plan which he has directed.

Component B: Staff and subordinate commanders provide tactically sound recommendations.

3. **The direct support field artillery battalion commander visualizes the battlefield.** [TRADOC Pam 11-9, Chap 7 and App D]

3c. The DS FA battalion commander anticipates future requirements and actions (sequels) based on his projection of the outcome of the current mission. [FM 101-5, pp. 1-15, 4-46, and App C]

3c2 Mission.

c) Branches, sequels, and alternative COAs for the current mission are reviewed to determine potential for future planning.

3c3 Enemy.

b) SIT TEMP and event templates are updated and assessed to appraise the DS FA battalion's posture to meet newly identified potential situation.

c) HPTs are updated, and the attack-guidance matrix (AGM) and the DST are integrated based on changes to the enemy situation.

3c4 Troops.

b) Necessary changes to positioning of DS FA battalion security elements and subordinate unit local force protection activities are determined to:

(1) Counter threats not previously identified during the initial IPB.

(2) Meet requirements generated by changes to requirements for withdrawal, battle hand-over, reconstitution, or preparation for follow-on missions.

(3) Replace losses in order to continue force protection actions.

c) Necessary changes to the planned role and employment of fire support assets are determined.

d) Impact of DS FA battalion plan on other units' plans.

e) Impact of other units' plans on DS FA battalion plans.

f) Adequacy of future logistics support areas and MSR/ASRs is determined.

g) Adequacy of supplies to meet new requirements is determined.

h) The DS FA battalion commander reviews and updates friendly force information requirements (FFIR) as needed.

3c5

Terrain.

- a) Impact of terrain factors in and around the proposed firing positions.
- b) Impact of projected weather.
- c) Ability to range projected HPTs with the predominant propellant available.
- d) Deconfliction of available terrain with brigade XO.

3c6

Time.

- a) Projections of time available versus time required to meet new mission requirements.
- b) Changes to mission timelines necessitated by enemy activities.

4. **The direct support field artillery battalion commander directs changes to the operation or plan.** [TRADOC Pam 11-9, Chap 7 and App D]

4b. The DS FA battalion commander conducts the military decision-making process (MDMP) in a time constrained environment. [FM 101-5, pp. 4-41 - 4-60]

4b1 The DS FA battalion staff provides information and recommendations as required.

4b3 The DS FA battalion commander develops an FA support plan; considers: [FM 101-5, p. 4-48]

- a) The brigade commander's intent for fires, the designated HPTs, and critical targets by phase.
- b) The status of ammunition by type and availability of propellant. (white or green bag).
- c) Whether the DS FA battalion and reinforcing battalion (if any) can satisfy the commander's intent for fires.
- d) The commander may request information from the staff to support his COA development. The staff:
 - (1) Uses products and analyses developed during the initial mission MDMP to define branches and sequels for consideration.
 - (2) Provides recommendations to modify existing branches and sequels to meet new requirements.
 - (3) Provides recommendations on developing new branches and sequels based on new requirements.
- e) METT-T factors:
 - (1) Mission: identifies specified and implied tasks which his DS FA battalion must accomplish.
 - (2) Enemy: the DS FA battalion commander identifies:
 - (a) Designated HPTs and other critical targets by phase from the fire support plan.

- (b) Requirement for sensor collection plan and triggers linked to HPTs.
 - (3) Terrain and weather: the DS FA battalion commander identifies relevant or specific aspects of terrain: slope, cant, site to crest, predominant range to critical HPTs, and changes in meteorology.
 - (4) Troops: the DS FA battalion commander analyzes the DS FA battalion and reinforcing battalion in terms of capability relative to what he believes necessary to accomplish the mission.
 - (a) Capabilities, strengths, and weaknesses of subordinate commanders and units.
 - (b) Weapon systems and equipment.
 - (c) Disposition.
 - (d) Supplies.
 - (e) Troop rest and morale.
 - (5) Time: the DS FA battalion commander determines the time available for planning, preparing, and executing the operation for both enemy and friendly forces. He integrates the time for movement with the time of attack of critical targets using the AGM and FSEM.
- 4d. The DS FA battalion commander describes his revised concept to his staff. [FM 101-5, p. 4-49]
- 4d3 If time is available, the DS FA battalion staff conducts mission analysis and:
- a) Develops details on COA provided by the commander.
 - b) Develops branches and sequels to the selected COA which adhere to the commander's guidance.
5. **The direct support field artillery battalion commander directs and leads subordinate forces.** [TRADOC Pam 11-9, Chap 7 and App D]
- 5c. The DS FA battalion commander and subordinates plan and prepare for rehearsals. [FM 101-5, App M; FM 71-3, pp. 3-23 - 3-29; FM 6-20-1, pp. 3-12 - 3-14]

OUTCOME 4 ASSESSMENT

OUTCOME 4: Sound (feasible, suitable, acceptable) decisions are made by the DS FA Bn commander and others within the DS FA Bn.	Adequate	Marginal	Not Adequate
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(Use Tables 2, 3, 6, 7, and 8)

Assessment Statements

- DS FA Bn commander projects outcome of current battle to determine future requirements and actions.
- DS FA Bn commander determines whether projected endstates related to METT-T and BOS factors will still permit the DS FA Bn to accomplish its mission.
- If the current plan is inadequate based on the commander's revised assessment, the DS FA Bn commander adapts the military decision making process to the time and staff that are available for planning:
 - Current products are modified.
 - DS FA Bn commander develops an FA support plan.
 - DS FA Bn commander issues directive and very specific guidance.
- Revised plan meets the following criteria:
 - Suitable
 - Accomplishes DS FA Bn mission.
 - Meets the brigade and division commanders' intents.
 - Accomplishes the DS FA Bn commander's intent and desired endstate.
 - Feasible
 - Can be executed within available time (includes duration and distance factors).
 - Can be accomplished with current condition of roads and terrain and the required depth of action and terrain available.
 - DS FA Bn has the combat power at critical points to accomplish the mission.
 - DS FA Bn has the special equipment (e.g., radar) and personnel to accomplish the mission.

-
- Acceptable
- Can be conducted within acceptable costs/risks.
- Control measures are firm enough to prevent fratricide, civilian casualties, and collateral damage.
- Control measures are flexible enough to permit reaction to changes in the situation.

OUTCOME 4 DIAGNOSTIC AID

OUTCOME 4: Sound (feasible, suitable, acceptable) decisions are made by the DS FA Bn commander and others within the DS FA Bn.

Task Elements

1. The direct support field artillery battalion command posts and staff manage and maintain command, control, and communications.

1a. Battalion CPs manage means of communicating information. [FM 101-5, Chap 6 and App B, L; ARTEP 6-115-MTP, Task 06-3-01-2150, 2160, 2120]

1a2 The DS FA battalion XO, as primary logistician:

NOTE: The DS FA battalion XO is the second in command of the DS FA battalion. He is the senior staff officer of the unit and serves as the primary logistician. He must position himself, based on the location of the DS FA battalion commander, where he can best perform either function (e.g., when the DS FA battalion commander is with the brigade commander and staff, the XO may devote more of his time in his role as second in command). [FM 6-20-1, p. 3-4]

c) Determines the best organization of the trains to support the DS FA battalion commander's intent based on the following considerations:

- (1) Factors of mission, enemy, terrain, troops, and time available (METT-T).
- (2) Ability to command, control, and communicate logistics operations.
- (3) Security of the trains.
- (4) Location of the brigade support area (BSA).
- (5) Responsiveness.

1a3 The DS FA battalion assistant S3 manages the operations of the DS FA battalion tactical operations center (TOC) and the operations section when the DS FA battalion S3 is not available. [FM 6-20-1, p. 3-2]

b) Initiates staff action as directed by the DS FA battalion commander, XO, and S3.

1a4 DS FA battalion S3 directs staff meetings: [AN]

d) Initiates staff planning as appropriate.

3. **The direct support field artillery battalion commander visualizes the battlefield.** [TRADOC Pam 11-9, Chap 7 and App D]

3a. The DS FA battalion commander updates his estimate based on his assessment of the current situation. [FM 100-5, pp. 2-14/15; FM 101-5, pp. 1-4 - 1-11, 3-85, Chap 4 and App C; FM 71-3, p. 3-2; Battle Command]

3a1

Mission.

a) Identifies changes to:

- (1) The brigade and division commanders' mission and intent.
- (2) The brigade concept of the operation.
- (3) The concept of fires.

b) Based on reports from the DS FA battalion staff, LNOs, and subordinate/supporting commanders, analyzes progress and completion of DS FA battalion preparation activities and needed endstate before the battle to include:

- (1) Planning and refinement of plans.
- (2) Coordination.
- (3) DS FA battalion elements' preparations.

3a2

Enemy.

a) Validity of estimate.

- (1) Changes in enemy strength.
- (2) Changes in enemy capabilities.
- (3) Changes in projected enemy COA.
- (4) DS FA battalion commander's designated essential elements of friendly information (EEFI).

b) Collection plan responsiveness.

- (1) Whether PIR and IR are being filled.
- (2) Adequacy of DS FA battalion collection assets' positions, activities, and objectives.
 - (a) FISTs, FOs, and COLTs.
 - (b) Army aviation elements.
 - (c) UAVs and ground support radars.
 - (d) Adjacent and forward units.
 - (e) Radars.
- (3) Need and adequacy of external information sources.

- (a) Forward air control (FAC) and CAS aircraft.
- (b) Brigade staff and assets.
- (c) DIVARTY.
- (4) Validity of the initial IPB and threat analysis documents.
 - (a) SIT TEMP.
 - (b) Event template.
 - (c) Order of battle.
 - (d) Obstacles and fortification locations.
 - (e) Intelligence estimate.

3a3 Troops.

- a) Validity of designated FFIR.
- b) Disposition and locations of:
 - (1) Brigade units. [ARTEP 71-3-MTP, Task 71-3-3003/3]
 - (2) DS FA battalion and other supporting FA and fire support assets. [ARTEP 6-115-20-MTP, Task 06-3-02-110/3]
 - (3) Target acquisition and collection systems. [ARTEP 6-115-MTP, Task 06-1-02-2600, 2001]
- c) Composition and task organization changes of subordinate units. [ARTEP 6-115-MTP, Task 06-3-01-2120]
- d) Strengths of subordinate units. [ARTEP 6-115-MTP, Task 06-3-01-2120]
- e) Peculiarities and weaknesses of subordinate units' preparation and the implementation of the FA support plan. [ARTEP 6-115-MTP, Task 06-3-01-2120]
- f) Vulnerability of friendly units to enemy NBC attacks. [ARTEP 6-115-MTP, Task 20/06-3-02-1240]
- g) Losses (e.g., to enemy action, maintenance problems) of artillery tubes. [FN]
- h) Loss (e.g., to enemy action, maintenance) of target acquisition systems, or equipment (e.g., FIST, COLTs, radars, forward observers (FOs)). [FN]
- i) Losses or shortages of target acquisition personnel. [FN]
- j) Subordinate unit plans and preparations, which include:
 - (1) Subordinate commanders' understanding of and plans to achieve the brigade commander's intent and fire support guidance.
 - (a) Battery commanders' briefback and backbrief of their missions.
 - (b) Visits to units.

- (2) Physical preparation of target acquisition systems and observers (e.g., FOs, enlisted terminal attack controller [ETAC], supporting arms liaison teams (SALTs), COLTs).
- (3) Occupation of firing positions and preparations to fire by batteries.
 - (a) Troop leading procedures.
 - (b) Pre-combat inspections.

3a4 Terrain.

- a) Changes to initial terrain estimate and impact of differences on the concept of the operation.
 - (1) Terrain factors.
 - (a) Trafficability.
 - (b) Degree of slope or cant.
 - (c) Ability to emplace vehicles' spades.
 - (d) Site to crest.
 - (e) Avenues of approach.
 - (2) Obstacles and progress of DS FA battalion efforts to reinforce the terrain.
- b) Weather and forecasted weather factors' validity.
 - (1) Visibility (including fog and cloud cover) and light data.
 - (2) Effects of weather.
 - (a) Impact on trafficability.
 - (b) Impact of meteorology on delivery of fires.

3a5 Time.

- a) Accomplishment of key mission preparations in accordance with planned timelines.
- b) Based on what has and has not been accomplished, sufficiency of time available to complete all tasks.

3a6 The DS FA battalion commander projects the outcome of the current battle based on his evaluation of the current plan and DS FA battalion preparedness by using BOS assessment. [FM 101-5, pp. 1-11 - 1-17, 4-48, App C]

- a) Intelligence.
 - (1) The DS FA battalion commander assesses HPTs by phase.
 - (2) The DS FA battalion commander assesses the collection plan to determine if the products will provide the necessary trigger for attack of HPTs approved by the brigade commander.

- (3) The DS FA battalion commander assesses the critical targets by phase of maneuver to ensure that unit moves are integrated.
- b) Fire support.
 - (1) The DS FA battalion commander determines if fire plans and target lists have been refined for changes due to:
 - (a) Bottom-up refinements.
 - (b) Refinement of target location.
 - (c) Refinement of firing data.
 - (2) The commander assesses all FSCM to determine if they are:
 - (a) Current.
 - (b) Accurate.
 - (c) Proper to support the tactical plan.
 - (3) The DS FA battalion commander ensures that adequate fire support is available for forces in contact.
 - (4) The DS FA battalion commander assesses the FA support plan to ensure that it supports the fire support plan and provides for priority to the main effort.
 - (5) The DS FA battalion commander ensures adequate fire support for the brigade R&S and counter-reconnaissance forces.
 - (6) The DS FA battalion commander assesses the target acquisition plan.
 - (a) Status of radars.
 - (b) Radar cueing plan.
 - (c) Primary and alternate trigger for each HPT.
- c) Mobility and survivability.
 - (1) Commander reviews obstacle plan for:
 - (a) Status of obstacle emplacement.
 - (b) Fires planned to support purpose of all obstacles.
 - (c) Principal and alternate observer designated to trigger fires on each obstacle.
 - (d) Changes to FASCAM employment plans required by the brigade engineer and brigade FSO based on new information.
- d) CSS.
 - (1) CSS priorities based on new information.
 - (2) Supply support adequate to support the operation.
 - (3) Delivery of supplies to DS FA battalion units on time to support the operation.
 - (4) Sufficient transportation assets available and operational to support the operation.

- (5) Adequate personnel fill to enable DS FA battalion units to accomplish their missions and tasks.
 - (6) Status of morale in the DS FA battalion.
 - (7) Current and projected state of maintenance of equipment in the DS FA battalion.
 - (8) Status of medical personnel, supplies, and equipment to support the operation.
 - e) Command and control.
 - (1) Status of key communications links within the DS FA battalion, with supported units FSO/FIST, with brigade and DIVARTY, and with the reinforcing battalion (digital and voice).
 - (2) Current and projected locations of DS FA battalion CPs provide for continuous command and control.
- 3b. The DS FA battalion commander projects the outcome of the current mission based on his evaluation of the current plan and DS FA battalion preparedness. [FM 101-5, p. 1-11 - 1-17, 4-48]
- 3c. The DS FA battalion commander anticipates future requirements and actions (sequels) based on his projection of the outcome of the current mission. [FM 101-5, pp. 1-15, 4-46, and App C]
- 3d. The DS FA battalion commander decides whether the plan needs to be changed. [FM 101-5, p. 4-48]
- 3d1 The DS FA battalion commander decides the current plan meets the assessed situation and continues to monitor and direct DS FA battalion battle preparations. [FM 101-5, p. 4-48]
- 3d2 The DS FA battalion commander decides the plan must be modified. [FM 101-5, p. 4-48]
- a) The DS FA battalion commander decides to initiate a FRAGO; considers: (See task 4 for description of how to develop and issue this FRAGO) [FM 101-5, pp. 1-14 - 1-16]
 - (1) Whether COAs previously developed can be modified and developed as the new plan.
 - (2) Time available to develop, coordinate, implement, and rehearse a new plan.
 - (3) Subordinate units' time to complete new preparation requirements under the new plan and task organization.
 - (4) The DS FA battalion staff's ability to continue to monitor and direct current DS FA battalion activities while meeting new planning requirements.
 - b) The DS FA battalion commander assesses the impact of new FRAGOs from brigade.
 - (1) Time required to plan and prepare for new mission based on current mission timelines.
 - (2) Ability of the DS FA battalion to respond to the new situation based on level of mission preparedness.
 - (a) Fire units available to respond without impacting DS FA battalion ability to perform the current mission.

- (b) Availability of combat support (CS), CSS, and supplies to support the new situation without impacting on support necessary for the current mission.
 - (3) Capability of the staff to dedicate time and effort to plan and coordinate new missions; impact of diverting key staff members from monitoring preparations for the current mission to planning for a new mission.
 - c) The DS FA battalion commander determines effects on the military decision-making process (MDMP) based on complexity, potential probable confusion on the battlefield, staff availability, and time available. [FM 101-5, Chap 4]
- 4. **The direct support field artillery battalion commander directs changes to the operation or plan.** [TRADOC Pam 11-9, Chap 7 and App D]
 - 4b. The DS FA battalion commander conducts the MDMP in a time constrained environment. [FM 101-5, pp. 4-41 - 4-60]
 - 4b1 The DS FA battalion staff provides information and recommendations as required.
 - 4b2 When planning changes to current orders during the preparation phase of the battle, the DS FA battalion commander must consider:
 - a) Using products developed during the MDMP for the current mission as reference points from which modifications are made to predetermined branches and sequels.
 - (1) Modifications to fire support plan:
 - (a) Approved by brigade commander.
 - (b) Assess requirement to modify existing HPTs.
 - (c) Modifications to HPTs may require modification of other products:
 - 1 DST.
 - 2 AGM.
 - 3 FSEM.
 - (2) Terrain analysis.
 - (a) Impact on range to critical targets by phase as a result of changes to HPTs.
 - (b) Assess requirements for new positions and movement plans using existing products.
 - 1 MCOO.
 - 2 Modify position area overlay.
 - (3) Enemy order of battle and updated IPB products.
 - (a) Modify sensor collection plan.

- (b) Modify triggers.
 - (4) Updated staff estimates.
 - (a) DS FA battalion capabilities.
 - (b) Constraints.
 - (5) PIR, EEFI, and FFIR requested by the commander.
 - b) The DS FA battalion commander and staff simultaneously monitor, plan, and direct all aspects of DS FA battalion operations (e.g., execution of fire support for the counter-reconnaissance battle, preparations for the current mission, changes to the current plan, and the next mission being formulated).
 - c) The DS FA battalion commander and staff anticipate the outcome of the current fight to begin considering future requirements and actions.
 - d) Components of the DS FA battalion commander's assessment, based on the situation, are:
 - (1) Current situation compared to required battle endstates of friendly and enemy forces.
 - (2) Recognition of similarities or differences between initial plan and new requirements.
 - (3) Assessment of friendly force posture, enemy probable actions and postures, and battlespace.
- 4b3 The DS FA battalion commander develops an FA support plan; considers: [FM 101-5, p. 4-48]
- a) The brigade commander's intent for fires, the designated HPTs, and critical targets by phase.
 - b) The status of ammunition by type and availability of propellant (white or green bag).
 - c) Whether the DS FA battalion and reinforcing battalion (if any) can satisfy the commander's intent for fires.
 - d) The commander may request information from the staff to support his COA development. The staff:
 - (1) Uses products and analyses developed during the initial mission MDMP to define branches and sequels for consideration.
 - (2) Provides recommendations to modify existing branches and sequels to meet new requirements.
 - (3) Provides recommendations on developing new branches and sequels based on new requirements.
 - e) METT-T factors:
 - (1) Mission: identifies specified and implied tasks which his DS FA battalion must accomplish.
 - (2) Enemy: the DS FA battalion commander identifies:
 - (a) Designated HPTs and other critical targets by phase from the fire support plan.
 - (b) Requirement for sensor collection plan and triggers linked to HPTs.
 - (3) Terrain and weather: the DS FA battalion commander identifies relevant or specific aspects of terrain: slope, cant, site to crest, predominant range to critical HPTs, and changes in meteorology.

- (4) Troops: the DS FA battalion commander analyzes the DS FA battalion and reinforcing battalion in terms of capability relative to what he believes necessary to accomplish the mission.
 - (a) Capabilities, strengths, and weaknesses of subordinate commanders and units.
 - (b) Weapon systems and equipment.
 - (c) Disposition.
 - (d) Supplies.
 - (e) Troop rest and morale.
 - (5) Time: the DS FA battalion commander determines the time available for planning, preparing, and executing the operation for both enemy and friendly forces. He integrates the time for movement with the time of attack of critical targets using the AGM and FSEM.
-
- 4b4 The DS FA battalion commander conducts mission risk assessment to ensure that conditions most likely to cause mission failure and accidents (including fratricide) have been mitigated.
 - a) DS FA battalion units have been tasked within their capabilities.
 - b) Procedural and positive risk-reduction control measures have been implemented, for example:
 - (1) Emphasizes situational awareness.
 - (2) Emphasizes positive target identification.
 - (3) SOPs are consistent with doctrine and are adhered to.
 - (4) Doctrinally correct terminology is applied to all control measures; e.g., fire support coordination lines (FSLs), RFLs.
 - (5) Rules of engagement are clear.
 - 4b5 The commander reviews his current CCIR to determine: [FM 101-5, pp. 4-47/48]
 - a) Validity of CCIR.
 - b) New CCIR required to provide the DS FA battalion commander with the information needed to make decisions about the plan.
 - 4c. The DS FA battalion commander performs a suitability-feasibility-acceptability analysis of the new plan. The commander performs the analysis by himself or with staff assistance. [FM 101-5, p. 4-51]
 - 4c1 Suitability factors:
 - a) New concept accomplishes the DS FA battalion mission.

- b) New concept meets the brigade and division commanders' intents.
- c) The plan accomplishes his intent for the DS FA battalion's endstate relative to the intended endstate for the enemy.

4c2 Feasibility factors:

- a) Time to execute the plan(s) as designed.
 - (1) Duration of events.
 - (2) Time and distance factors for maneuver and fires.
- b) There is sufficient ground and air space to accomplish the plan(s) as designed.
 - (1) Roads and terrain support the plan.
 - (2) Depth of action.
- c) The DS FA battalion has the means to execute the plan(s) as designed.
 - (1) DS FA battalion combat power versus the enemy (force ratios).
 - (2) Special equipment and personnel to accomplish the mission (e.g., bridging equipment, mine clearing, Army aviation, CAS, etc.).
- d) Impact on on-going preparation activities.
- e) Impact on subordinate units and combat multipliers.
- f) Requirements to alter task organization.

4c3 Acceptability: mission can be accomplished within acceptable levels of risk to mission success and loss of personnel and equipment.

4d. The DS FA battalion commander describes his revised concept to his staff. [FM 101-5, p. 4-49]

4d1 The DS FA battalion commander explicitly expresses COA concepts:

- a) Intent and desired endstate.
- b) Concept of operations.
 - (1) Major components of maneuver.
 - (2) Integration of combat multipliers.
 - (3) Critical points and center of gravity.
- c) Enemy COA(s) to be considered.
- d) CCIR.
- e) Limitations.
- f) Risks.

4d2 The DS FA battalion commander provides the concept and guidance to the staff for detailed COA development and mission analysis.

4d3 If time is available, the DS FA battalion staff conducts mission analysis and:

- a) Develops details on COA provided by the commander.
- b) Develops branches and sequels to the selected COA which adhere to the commander's guidance.

OUTCOME 5 ASSESSMENT

OUTCOME 5: Affected units and personnel receive relevant direction, changes, and refinements to plans in time to perform troop leading procedures and required preparation. (Use Table 4)

Component A: Staff issues WARNOs and FRAGOs.	Adequate	Marginal	Not Adequate
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Assessment Statements

- If situation warrants, the DS FA Bn commander directs staff to prepare a FRAGO to change plans.
- The DS FA Bn issues WARNOs to alert staff members and subordinate elements that the plan will be changed.
- FRAGO is complete, contains:
 - Allocation of all FA assets.
 - Projected changes to the allocation of FA assets based on projected on-order missions.
 - DS FA Bn commander's concept of the operation.
 - Requirements for positioning and movement of firing units.
 - Controlled supply rate for ammunition, if any.
 - Arrangements for command and control if they differ from unit SOPs.
 - Specific instructions for attached target acquisition, survey, and meteorological assets.
 - Specific instructions for CSS, if different from unit SOPs.
 - Restrictions on ammunition expenditures, types of fires, and measures to limit risk to friendly troops.
 - Current and on-order fire support coordination measures.
 - The target list developed by the brigade.
 - Schedules for preplanned fires.
 - Special instructions on rules of engagement, fire support communications, and logistic support.
 - Locations of CPs, ammunition supply points, and ammunition transfer points.
 - NBC coordinating instructions.
 - Modified timeline.

- Documents that support FRAGO are updated and reflect commander's current guidance:

- Graphics.
- DST.
- Synchronization matrix.
- Fire support plan.
- Fire support execution matrix.
- Communications plan.
- CSS plan.

- The DS FA Bn FRAGO is distributed to all affected elements (Table 4) in time for the elements to perform troop leading procedures and required preparation.

- Subsequent FRAGOs are distributed as the plan is refined based on rehearsals, visits and inspections.

Component B: Staff directs preparations for mission execution.		
		Not Adequate

Assessment Statements

- Firing elements are repositioned to provide continuous support during movement.
- Target acquisition assets are repositioned.
- Firing elements receive necessary supplies.
- The DS FA Bn FDO determines the need for precision registration and directs a precision registration (if required).

OUTCOME 5 DIAGNOSTIC AID

OUTCOME 5: Affected units and personnel receive relevant direction, changes, and refinements to plans in time to perform troop leading procedures and required preparation.

Task Elements

Component A: Staff issues WARNOs and FRAGOs.

4. **The direct support field artillery battalion commander directs changes to the operation or plan.** [TRADOC Pam 11-9, Chap 7 and App D]
 - 4a. The DS FA battalion commander and/or staff issue WARNOs to alert staff members and subordinate elements that the plan will be changed. WARNOs may include: [FM 101-5, p. 4-55]
 - 4a1 The enemy situation; battlefield events; and the friendly mission, task, or operation.
 - 4a2 The brigade and division commanders' missions.
 - 4a3 The brigade and division commanders' intents.
 - 4a4 The DS FA battalion commander's intent statement.
 - 4a5 The earliest time of movement or degree of notice the DS FA battalion commander gives to the main body.
 - 4a6 Orders for preliminary action, advanced party reconnaissance, and selection of position.
 - 4a7 Service support instructions, any special equipment necessary, regrouping of transportation, or preliminary moves to assembly areas.
 - 4a8 The rendezvous point or time for assembly of an orders group, whether commanders or representatives are to attend, and time needed for issuing written orders.

- 4b. The DS FA battalion commander conducts the MDMP in a time constrained environment. [FM 101-5, pp. 4-41 - 4-60]
- 4b1 The DS FA battalion staff provides information and recommendations as required.
- 4b2 When planning changes to current orders during the preparation phase of the battle, the DS FA battalion commander must consider:
 - a) Using products developed during the MDMP for the current mission as reference points from which modifications are made to predetermined branches and sequels.
 - (1) Modifications to fire support plan:
 - (a) Approved by brigade commander.
 - (b) Assess requirement to modify existing HPTs.
 - (c) Modifications to HPTs may require modification of other products:
 - 1 DST.
 - 2 AGM.
 - 3 FSEM.
 - (2) Terrain analysis.
 - (a) Impact on range to critical targets by phase as a result of changes to HPTs.
 - (b) Assess requirements for new positions and movement plans using existing products.
 - 1 MCOO.
 - 2 Modify position area overlay.
 - (3) Enemy order of battle and updated IPB products.
 - (a) Modify sensor collection plan.
 - (b) Modify triggers.
 - (4) Updated staff estimates.
 - (a) DS FA battalion capabilities.
 - (b) Constraints.
 - (5) PIR, EEFI, and FFIR requested by the commander.
 - b) Typically, modifications to existing fire plans may provide the synchronization of fire support required to support a new course of action. If not, the FSO/FSCoord may be required to use quick fire planning techniques (addressed in function analysis of brigade BF 15).

- 4b6 The DS FA battalion commander and staff simultaneously monitor, plan, and direct all aspects of DS FA battalion operations (e.g., execution of fire support for the counter-reconnaissance battle, preparations for the current mission, changes to the current plan, and planning for the next mission when information is available).
- 4b7 The DS FA battalion commander and staff provide direction, guidance, and monitoring of DS FA battalion preparations to be ready no later than the designated time, make changes in a timely manner, and, if appropriate, plan for a future mission.
- 4e. The DS FA battalion staff prepares and publishes FRAGOs. [FM 101-5, App H]
- 4e1 The DS FA battalion S3 manages and supervises internal and external coordination by the staff to integrate plan refinements.
- 4e2 The staff takes prompt action to accomplish the guidance given by the commander.
a) Publishes refinements to orders, planning, and execution products such as DST, synchronization matrix, and FSEM.
b) Initiates requests to higher and adjacent units for additional support.
- 4e3 The staff at the DS FA battalion TOC refines plans, facilitates planning for future operations, identifies and corrects problems identified during subordinate unit preparations, and coordinates additional support from DIVARTY.
- 4e4 The DS FA battalion staff develops FRAGOs reflecting changes to the initial plan for the DS FA battalion commander's approval: [FM 101-5, App H]
a) Graphics and control measures for the operation.
b) DST and synchronization matrix.
c) Fire support plan, FSEM, FSCM.
d) Communications plan.
e) CSS plan.
- 4f. The DS FA battalion S3 issues complete FRAGOs which contain: [FM 101-5, App H]
- 4f1 Allocation of all FA assets.
- 4f2 Projected changes to the allocation of FA assets based on tactical contingencies in the OPOD (on-order missions).

- 4f3 The DS FA battalion commander's concept of the operation.
- 4f4 Requirements for positioning and movement of firing units to support the fire support plan (FA support matrix).
- 4f5 The controlled supply rate for ammunition, if any.
- 4f6 Arrangements for command and control if they differ from unit SOPs.
- 4f7 Specific instructions for attached target acquisition assets, survey, and meteorology.
- 4f8 Specific instructions for combat service support, if different from normal unit SOPs.
- 4f9 Restrictions on ammunition expenditures, types of fires, and limiting risk to friendly troops.
- 4f10 Current and on-order fire support coordinating measures.
- 4f11 The target list developed by the brigade.
- 4f12 Schedules for preplanned fires.
- 4f13 Special instructions on rules of engagement, fire support communications, and logistic support.
- 4f14 Locations of CPs, ammunition supply points (ASPs), and ammunition transfer points (ATPs).
- 4f15 NBC coordinating instructions.
- 4g. The DS FA battalion commander approves FRAGOs and directs members of his staff to issue FRAGOs based on his approval or in compliance with his guidance. [FM 101-5, p. 4-49]
- 4h. The DS FA battalion commander takes actions to ensure that subordinate leaders have a clear understanding of his intent and concept. [FM 101-5, pp. 4-59/60]

- 4h1 The DS FA battalion commander directs the DS FA battalion leadership to conduct leaders' reconnaissances.
- 4h3 The DS FA battalion commander briefs and disseminates updated orders, DST, synchronization matrix, and other mission documents.
5. **The direct support field artillery battalion commander directs and leads subordinate forces.** [TRADOC Pam 11-9, Chap 7 and App D]
- 5b. The DS FA battalion commander and staff coordinate and integrate tactical operations through backbriefs. [FM 101-5, pp. 4-59, 4-60]
- 5b4 DS FA battalion staff disseminates information and changes which occur as a result of plan refinement.
- 5f. The DS FA battalion concept is revised based on results of rehearsals, visits, and inspections.
- 5f1 The DS FA battalion commander ensures that FASP/FRAGO and all critical associated documents are updated and reflect his most current guidance (see task 3 for the refinement of plans and orders).
- a) The DS FA battalion commander modifies guidance and orders based on continued preparation activities, rehearsals, and other METT-T information.
- b) The DS FA battalion staff refines original FASP and all associated documents based on continued preparation activities, rehearsals, and other METT-T information.
- c) The DS FA battalion staff refines FRAGO and all associated documents based on continued preparation activities, rehearsals, and other METT-T information.
- 5f2 The DS FA battalion staff distributes refined/updated field artillery support plan (FASP), FRAGO, and associated documents to the subordinate units.

Component B: Staff directs preparations for mission execution.

1. **The direct support field artillery battalion command posts and staff manage and maintain command, control, and communications.**

1a. Battalion CPs manage means of communicating information. [FM 101-5, Chap 6 and App B, L; ARTEP 6-115-MTP, Task 06-3-01-2150, 2160, 2120]

1a2 The DS FA battalion XO, as primary logistician:

NOTE: The DS FA battalion XO is the second in command of the DS FA battalion. He is the senior staff officer of the unit and serves as the primary logistician. He must position himself, based on the location of the DS FA battalion commander, where he can best perform either function (e.g., when the DS FA battalion commander is with the brigade commander and staff, the XO may devote more of his time in his role as second in command). [FM 6-20-1, p. 3-4]

- a) Supervises the activities of the DS FA battalion CSS staff.
- b) Ensures that DS FA battalion units are logistically sustained.
- c) Determines the best organization of the trains to support the DS FA battalion commander's intent based on the following considerations:
 - (1) Factors of mission, enemy, terrain, troops, and time available (METT-T).
 - (2) Ability to command, control, and communicate logistics operations.
 - (3) Security of the trains.
 - (4) Location of the brigade support area (BSA).
 - (5) Responsiveness.

1b. DS FA battalion CPs maintain communications. [ARTEP 6-115-MTP, Task 6-2-02-3000, 5000, 06-2-02-4000, 06-2-01-6000; FM 6-20-40, Chap 2]

1b6 Firing elements of the DS and reinforcing battalions are repositioned, if necessary, to support the operation.

- a) Units are positioned in depth to provide continuous support during movement.
- b) Hasty displacement criteria are reviewed for units required to deliver high volumes of fire (i.e., to support preparation fires, obscuration fires, field artillery-delivered FASCAM).
- c) The DS FA battalion FDO reviews the requirements for accurate predicted fires to determine the need for precision registration.
 - (1) Accurate target location and size.
 - (2) Accurate firing unit location.
 - (3) Weapon and ammunition information.
 - (4) Meteorology information.
 - (5) Computational procedures.

- d) The DS FA battalion FDO directs a precision registration if required.
2. **Direct support field artillery battalion command posts acquire, evaluate, and communicate information and maintain status.** [TRADOC Pam 11-9, Section IV; "Battle Command," pp. 43, 65; ARTEP 6-115-20-MTP, Task 06-3-02-1100; FM 34-130, Chap 2; FM 6-20-40, Chap 2; FM 101-5, Chap 3, 5, App J]
 - 2a. The DS FA battalion staff officers acquire information. [TRADOC Pam 11-9, Chap 7 and App D]
 - 2a3 All DS FA battalion staff officers, LNOs, and subordinate leaders obtain information; they commonly: [FM 101-5, pp. 3-84, C-4, Chap 6, App A]
 - b) Obtain information relevant to fulfilling their areas of responsibility for the DS FA battalion's preparations for battle in order to: [FM 101-5, pp. 6-33, 6-34]
 - (1) Monitor and modify preparation activities as necessary.
 - 2d. The DS FA battalion CPs and staff communicate information. [FM 6-20-1, pp. 3-1 - 3-3; FM 6-20-40, p. 26; FM 6-20-50, App C; FM 101-5, Chap 5 and 6, App A, B and L; FN-NTC]
 - 2d4 The DS FA battalion FDO and FDC section disseminate the fire plan, target lists, support geometry, attack criteria, subscriber tables, and instructions for degraded operations and continuous operations (CONOPS) to all subordinate and supporting units.
 - 2d5 The brigade FSO, targeting officer and FSE section communicate DS FA battalion fire support situation and analysis of CCIR, IR, and routine information. [FM 101-5, App A; ARTEP 71-3 MTP, Task 71-3-9002/2, 3]
 - b) The brigade FSO and FSE section coordinate with adjacent and higher FSEs and DS FA battalion TOC to ensure that: [ARTEP 71-3- MTP, Task 71-3-9002/2]
 - (1) Planned brigade fire support will not interfere with other fire support systems, will not disrupt adjacent unit operations, and will not jeopardize troop safety.
 - (2) Fire support information and products (target lists, FSEM, CAS requests, and ATO) are exchanged and refined.
 - c) The brigade FSO and FSE section coordinate with DS FA battalion S3 and TF FSOs to verify: [ARTEP 71-3- MTP, Task 71-3-3001/2]
 - (1) Control measures delineating mutual boundaries.
 - (a) Directed by division.
 - (b) Internal boundaries (TFs, scouts, security forces).

- (2) Air space control measures.
 - (3) Boundaries and fire support coordinating measures.
 - (a) COLT/FIST no fire areas (NFAs).
 - (b) RFL.
 - (4) Signals and conditions under which restrictive measures will be emplaced or lifted.
- 2d8 DS FA battalion CSS officers report administrative and logistical situation and routine information to DS FA battalion staff and external sources:
- b) DS FA battalion CSS staff coordinates with DS FA battalion staff and DS FA battalion units: [FM 101-5, App A]
 - (1) To identify additional requests for support.
 - (a) Transportation assets.
 - (b) Medical augmentation.
 - (c) Repair of vehicles and weapons systems; recovery of damaged vehicles; transportation for return of repaired vehicles.
 - (d) Supply support.
 - (2) To coordinate the transportation of supplies and cargo through DS FA battalion units.
 - (3) To coordinate routine, emergency, and critical resupply operations (e.g., delivery times, types, and quantities of supplies required).
 - (4) To coordinate receipt and processing of replacements.
 - (5) To track evacuation of personnel and casualties.
 - (6) To process awards, decorations, promotions, and legal actions.
 - (7) To coordinate for security protection and support in general of CSS units operating forward.
 - c) DS FA battalion S4 coordinates with the DS FA battalion S3 to deconflict terrain requirements and projected locations for:
 - (1) Ammunition transfer points (ATPs).
 - (2) Ammunition supply points (ASPs).
 - (3) Forward arming and refuel points (FARPs).
 - d) DS FA battalion CSS staff performs coordination with FSB and supporting CSS headquarters: [FM 6-20-1, pp. 7-8-10]
 - (1) To process requests for support of DS FA battalion.
 - (a) Additional transportation assets.
 - (b) Medical augmentation and support.
 - (c) Support of resupply operations.

- (d) DS and GS maintenance support for vehicles and weapon systems; recovery of damaged vehicles and weapon systems; return of repaired vehicles and weapon systems.
- (2) DS FA battalion S4 coordinates the transportation of DS FA battalion supplies and cargo through adjacent units based on the locations of the BSA and other brigade or division supply points.
- (3) DS FA battalion S4 coordinates routine, emergency, and critical resupply of the DS FA battalion (e.g., delivery times, types, and quantities of supplies required).
- (4) DS FA battalion S1 receives and processes replacements.
- (5) DS FA battalion S1 tracks evacuation of personnel and casualties.
- (6) DS FA battalion S1 processes awards, decorations, promotions, and legal actions of DS FA battalion personnel.

3. **The direct support field artillery battalion commander visualizes the battlefield.** [TRADOC Pam 11-9, Chap 7 and App D]

3c. The DS FA battalion commander anticipates future requirements and actions (sequels) based on his projection of the outcome of the current mission. [FM 101-5, pp. 1-15, 4-46, and App C]

3c4 Troops.

b) Necessary changes to positioning of DS FA battalion security elements and subordinate unit local force protection activities are determined to:

- (1) Counter threats not previously identified during the initial IPB.
- (2) Meet requirements generated by changes to requirements for withdrawal, battle hand-over, reconstitution, or preparation for follow-on missions.
- (3) Replace losses in order to continue force protection actions.

3c6

Time.

- a) Projections of time available versus time required to meet new mission requirements.
- b) Changes to mission timelines necessitated by enemy activities.

4. **The direct support field artillery battalion commander directs changes to the operation or plan.** [TRADOC Pam 11-9, Chap 7 and App D]

4b. The DS FA battalion commander conducts the MDMP in a time constrained environment. [FM 101-5, pp. 4-41 - 4-60]

- 4b6 The DS FA battalion commander and staff simultaneously monitor, plan, and direct all aspects of DS FA battalion operations (e.g., execution of fire support for the counter-reconnaissance battle, preparations for the current mission, changes to the current plan, and planning for the next mission when information is available).
- 4b7 The DS FA battalion commander and staff provide direction, guidance, and monitoring of DS FA battalion preparations to be ready no later than the designated time, make changes in a timely manner, and, if appropriate, plan for a future mission.
5. **The direct support field artillery battalion commander directs and leads subordinate forces.** [TRADOC Pam 11-9, Chap 7 and App D]
- 5a. The DS FA battalion commander exercises leadership and maintains unit cohesion and discipline. [Battle Command, p. 11-15; FM 22-100, Chap 4, 5, and 6]
- 5a1 The DS FA battalion commander checks and ensures that orders are executed; reinforces discipline by demanding compliance to standards and his guidance.
- 5a5 The DS FA battalion commander monitors subordinates and himself for degradation of mental and physical capability. [Battle Command, pp. 27, 28]
- a) DS FA battalion commander monitors his own physical and mental state and gets rest.
 - b) DS FA battalion XO monitors the DS FA battalion commander's and staff members' physical and mental state and recommends rest periods.
 - c) DS FA battalion commander ensures that subordinate commanders and staff are rested and prepared for battle.
- 5d. The DS FA battalion conducts rehearsals.
- 5d1 The DS FA battalion conducts multiple rehearsals if time is available, to include contingency plans. [FM 101-5, p. M-15]
- a) Combined arms maneuver rehearsal.
 - b) CSSS/logistics rehearsal.
 - c) Fire support rehearsals.
 - (1) Brigade FS rehearsal.
 - (2) DS FA battalion technical rehearsal.

- 5d2 The DS FA battalion conducts realistic and thorough rehearsals; replicating the enemy accurately and: [FM 6-20-1, pp. 3-12 - 3-14]
- a) A slow walk-through of the mission is performed, with staff and subordinate leaders explaining their actions at every step to ensure understanding; then, with minimal guidance and at combat speed.
 - b) Integration and coordination of the BOS are accomplished by rehearsing each element's movement and positioning to ensure that all elements can be in place at designated times and that elements' activities do not interfere with other units' activities.
 - c) Rehearsals are conducted from the point of threat identification up to the point where the DS FA battalion is able to complete the mission and achieve the destruction of the enemy.
 - d) All DS FA battalion systems (vehicles, troops, combat multipliers) participate if time is available; representative portions of DS FA battalion systems participate if time or space is not available.
 - e) During the rehearsal, participants execute exactly as they would in combat.
- 5d3 The DS FA battalion commander controls and participates in the DS FA battalion rehearsal. [FM 6-20-1, pp. 3-12 - 3-14]
- a) Ensures that rehearsal meets his goals.
 - b) Briefs participants (or gives guidance to the S3 to brief) prior to the rehearsal.
 - (1) Introduces each participant with a brief description of his duties and roles for the mission.
 - (2) Provides an overview:
 - (a) Missions and tasks to be rehearsed.
 - (b) Sequence of activities rehearsed.
 - (c) Rehearsal timelines (e.g., time to rehearse each event/phase of the mission).
 - (d) Description of rehearsal site.
 - (3) The DS FA battalion commander verifies that subordinate commanders understand their mission. [FM 101-5, p. M-15]
 - c) Establishes the standards, outcomes, and goals to be achieved.
 - (1) Battery commanders, staff, FDCs and FSOs at all levels, and leaders fully understand their responsibilities within the parameters of the DS FA battalion commander's intent.
 - (2) Vulnerabilities in the plan are identified, and the means to mitigate them are determined.
 - (3) Checks are made to determine whether key aspects of the plan are feasible (e.g., observers confirm that they can see their targets; FDCs confirm that they have ballistic solutions to their targets).
 - d) Exercises the decision-making process he expects to be faced with during the mission:

- (1) Identifies times or events during the mission which will require him to make decisions.
 - (2) Observes how his decisions are implemented by DS FA battalion units and the staff.
 - (3) Identifies the key decision points which are most likely to produce the outcomes which supports his intent and desired endstate.
 - (4) Utilizes his decision-support aids (e.g., DST, synchronization matrix, FSEM).
 - e) Tracks the effect of DS FA battalion actions to achieve the desired endstate (with DS FA battalion S3 assistance).
- 5d4 The DS FA battalion S3 participates in DS FA battalion rehearsals. [FM 6-20-1, p. 3-12]
- a) Describes overall operation.
 - b) Ensures that DS FA battalion fires are integrated in terms of timing to support brigade movement and maneuver.
 - c) Describes the positioning and movement of the DS FA battalion commander during the mission.
 - d) Describes the positioning and movement of DS FA battalion CPs during the mission.
 - e) Assists the DS FA battalion commander in tracking the effect of DS FA battalion actions to achieve the desired endstate.
- 5d5 The DS FA battalion S2 participates in DS FA battalion rehearsals. [FM 6-20-1, p. 3-12]
- a) Portrays enemy actions and responses.
 - (1) Replicates all plausible and possible events and activities.
 - (2) Ensures that enemy actions are properly depicted to the DS FA battalion commander, subordinate commanders and staff.
 - (3) Portrays actions of HPT and other activities at NAIs and TAIs.
 - (4) Briefs threats to batteries by phase. [FN-NTC]
 - b) Provides updated enemy and terrain information.
- 5d6 DS FA battalion FDO participates in the rehearsal. [FM 6-20-1, p. 3-12]
- a) Supervises tactical and technical fire direction.
 - b) Ensures that all FDCs compute fire commands and acknowledge fire support coordinating measures.
 - c) Develops and supervises input of appropriate parameters into fire direction computers.
 - d) Confirms that FDCs can compute ballistic solutions to targets.
- 5d7 The DS FA battalion S4 (representing CSS staff) participates in rehearsals. [FM 6-20-1, p. 3-12]
- a) Describes CSS support of the DS FA battalion.

- b) Portrays positioning and movement of CSS assets.

5d8 FSO, FISTs, and COLTs. [FM 6-20-1, p. 3-12]

- a) Fire assigned targets.
- b) Ensure that assigned missions, especially high-priority ones, like FPFs, are loaded into the buffers of forward entry devices (FED).
- c) Point out and describe control measures (e.g., trigger lines and execution criteria), restrictions, and communications (primary and alternate) between observers and fire support elements which are practiced.
- d) Ensure that company/team fire support plans comply with the commander's guidance.
- e) Describe observer and back-up observer positioning, and responsibilities.
- f) Ensure that indirect fires "triggers":
 - (1) Are understood and demonstrated by observers.
 - (2) Can be executed by the fire support system (e.g., FA, mortars, CAS) based on ranges and timing.
 - (3) Are integrated with ground maneuver.

5d9

The DS FA battalion CMLO participates in DS FA battalion rehearsals. [FM 6-20-1, p. 3-12]

- a) Describes NBC decontamination support of the DS FA battalion (e.g., sites, equipment, procedures if other than SOP).
- b) Describes NBC reconnaissance support of the DS FA battalion.
- c) Portrays potential enemy use of chemicals against the DS FA battalion.
- d) Describes employment of smoke and other obscurants.

5d10 Battery commanders participate in DS FA battalion rehearsals. [FM 6-20-1, p. 3-12]

- a) Describe their missions.
- b) Demonstrate how they will accomplish their assigned mission.
 - (1) Movement.
 - (2) Positions (primary, alternate, subsequent).
 - (3) Timing of moves, positioning, and execution of fires.
 - (a) Must ensure that movement is integrated with timeline of attack of critical targets.
 - (b) Confirm that required quantity and type of ammunition is available in the position required (i.e., FASCAM, smoke).

- 5d11 Time dependent, the entire operation is thoroughly rehearsed using one of the following techniques: [FM 71-3, pp. 3-23 - 3-29; FM 6-20-1, pp. 3-12 - 3-14]
- a) Level I: small-scale rehearsals that do not involve mounted or dismounted maneuver. Techniques include:
 - (1) Map: Limited number of participants due to map size, used when time and space constraints are limited.
 - (2) Sand table/terrain model: Key leaders only, used to compensate for lack of sufficient time.
 - (3) Rock/stick drill: Same characteristics as sand-table/terrain models, except that participants replicate their actions or their unit's actions.
 - (4) Radio/telephone: Participants as directed by the DS FA battalion commander, used when time and enemy situations do not allow gathering of personnel; used to test radios and to determine backup systems in the event of communications equipment failure. The technical fire support rehearsal will be conducted in this manner to test all digital devices.
 - b) Level II: Focused rehearsals using selected personnel, usually key leaders, mounted in wheeled or tracked vehicles over similar terrain; technique used is tactical exercise without troops (TEWT), where key leaders participate, conducted on actual mission or similar terrain.
 - c) Level III: Full-scale dress rehearsal involving use of real time, mounted and dismounted maneuver over actual mission or similar terrain.
- 5d12 The DS FA battalion commander, XO, S3, and other key staff officers conduct rehearsal after action reviews (AARs) to ensure that critical tasks are rehearsed to acceptable levels of competence. [FM 101-5; p. M-15, FM 6-20-1, p. 3-12]
- 5e. The DS FA battalion commander ensures that each BOS is integrated with other BOS during visits, backbriefs, and rehearsals. [FM 101-5, pp. H-36 - H-42]
- 5e1 The DS FA battalion commander determines the state of DS FA battalion preparedness through visits and inspections. [Battle Command, p. 10-15]
- a) The DS FA battalion commander personally visits and inspects units.
 - (1) Manages his time and prioritizes his visits so that he visits at least those units most critical to the execution of his intent and concentrates on those units and officers that demonstrate leadership weaknesses; assesses unit capabilities; checks/listens to be sure tasks are understood.
 - (2) Questions subordinate leaders down to section level and compares their concepts of the operation with his to ensure that the DS FA battalion plan is understood at all levels.
 - (3) Inspects and spot-checks known weaknesses to ensure that they are corrected.

- (4) Makes a subjective assessment of cohesion, morale, and esprit.
 - (5) When actions taken are not in accordance with decisions, SOPs, Army standards, and the OPORD, refines plans and preparation efforts to counter weaknesses.
 - (6) Expedites actions, fixes problems, ensures compliance with guidance, and sets/refines standards.
 - (7) Informs DS FA battalion XO and his representatives inspecting preparations of any changes or refinements to the plan which he has directed.
 - b) The DS FA battalion commander extends his command presence by directing members of his staff (DS FA battalion XO, CSM, or one or more DS FA battalion staff members) to perform inspections and visits.
 - c) Inspections and visits are scheduled; units may be informed of times.
 - (1) Inspections and visits do not significantly interfere with, delay, or artificially sequence subordinate units' combat preparations.
 - (2) The commander determines and outlines those items and activities he will inspect based on:
 - (a) Experience.
 - (b) In-depth knowledge of the DS FA battalion and its equipment.
 - (c) Assessment of the current status of the units.
 - (d) Items which serve as indicators of maintenance, readiness, or morale trends within the unit (appearance, signs of fatigue).
- 5e2 The DS FA battalion commander directs adjustments to the DS FA battalion preparations.
- 5e3 The DS FA battalion commander integrates intelligence requirements with the other BOS.
- a) The commander and S2 review the intelligence synchronization matrix to ensure that the intelligence system provides answers to intelligence requirements in time to influence the decisions they support.
 - b) The DS FA battalion S2 uses the products of the targeting process to develop specific information requirements (SIR)/specific orders and requests (SOR) that integrate the activities of the collectors with the command's decision points.
 - c) The DS FA battalion commander ensures that decide, detect, deliver and assess methodology is integrated into the brigade commander's tactical decision-making process to ensure that targeting is integrated with all other aspects of the commander's plan.
- 5e4 The DS FA battalion commander integrates fire support within the fire support system itself and with the other BOS.
- a) Subordinate unit fire support plans are verified and integrated with the brigade fire support plan.

- b) The FA support plan is integrated with the brigade fire support (FS) plan to ensure that the right attack means is delivered on the right target at the right time:
 - (1) Shifts in priorities of fires and timing for preplanned and targets of opportunity engagements in each phase of the operation are integrated with the movement plan.
 - (2) Positioning of primary and back-up observers to allow observation on all priority targets and engagement areas (EAs) to provide the trigger, adjustment if necessary, and target effects for BDA.
 - (3) Priority of fires and priority targets for each phase of the mission, including method for prioritizing calls for fire to provide situationally alert fire support coordination.
 - (4) Finalizing artillery target groups and series to integrate massing of fires on the critical target with the brigade commander's plan.
 - (5) Employment concept for special munitions (i.e., FASCAM, smoke, dual purpose improved conventional munitions [DPICM], Copperhead) is completed and can be executed on the right target at the right time without interfering with the ability to provide adequate overall support for the plan.
 - (6) CAS and Army aviation refinements are reviewed for synchronization of SEAD and necessary FSCM to facilitate fires.
 - (7) Control measures and restrictions to facilitate rapid engagement of targets while simultaneously safeguarding friendly forces.
- 5e5 The DS FA battalion commander integrates CSS with the other BOS.
 - a) Verifies that CSS assets are positioned and prepared to provide planned supply, medical, and maintenance support to the DS FA battalion during the mission without interfering with the DS FA battalion delivery of fires.
 - b) Verifies that push packages of emergency resupplies are configured and ready to support continuous delivery of fires.
 - c) Reviews designated MSR and ASRs to ensure that CSS assets can provide timely response without interfering with movement or maneuver of fire support units or brigade elements.
 - d) Verifies that medical assets and operations are prepared to support the DS FA battalion and that the evacuation plan is integrated with the movement of units.
 - e) Ensures that vehicles and equipment are being recovered, repaired, and returned to user or delivered to higher maintenance echelons during the preparation phase.
 - f) Verifies that maintenance assets are task organized and are prepared to provide support; unit maintenance collection points (UMCPs) are prepared to displace and provide planned support.
- 5e6 The DS FA battalion commander integrates command and control with the other BOS.

- a) The DS FA battalion commander reviews the DST, synchronization matrix, and FSEM to ensure that:
 - (1) Plan modifications are integrated.
 - (2) Mission details to achieve the brigade and DS FA battalion commander's intent are adequately reflected.
 - (3) Fire support is integrated and integrated with maneuver.
- b) Planned command and control measures are reviewed by the DS FA battalion commander, staff, and subordinate leaders to assist in the synchronization of fire and maneuver:
 - (1) Maneuver graphics and control measures (e.g., phase lines, objectives, routes, check and coordination points) to integrate movement.
 - (2) Signals and quick execution code words to facilitate rapid execution of the plan.
 - (3) DST to ensure that critical HPTs and targeting adequately support critical decision points, if required.
 - (4) Synchronization matrix to integrate all aspects of the brigade commander's plan.
 - (5) FSEM and FSCM to integrate the effective but safe delivery of fires.
- c) CPs and staff are prepared to support the mission.
 - (1) Ready to receive, process, and disseminate information.
 - (2) Move and position to support the DS FA battalion commander during the battle.
 - (3) Coordinate and integrate combat multipliers.
 - (4) Exchange information with brigade and adjacent units.

OUTCOME 6 ASSESSMENT

OUTCOME 6: Subordinate leaders demonstrate an understanding of the critical elements of their own mission, the DS FA Bn mission, the DS FA Bn commander's intent, and mission essential tasks. (Use Tables 6, 7, and 8)

Component A: Subordinate leaders demonstrate a clear understanding of the concept of operations through backbriefs.	Adequate	Marginal	Not Adequate
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Assessment Statements

- When a FRAGO is issued, the DS FA Bn commander receives a confirmation briefing from subordinate leaders.
- The DS FA Bn commander conducts backbriefs with the DS FA Bn staff and subordinate commanders.
- During backbriefs, the DS FA Bn staff and subordinate commanders describe how their tasks will be conducted, including:
 - How their concepts of the operation supports the DS FA Bn commander's intent and contributes to the DS FA Bn mission.
 - The level of preparation achieved.
 - Preparation activities still to be completed.
 - How they will adhere to the mission timelines.
- The DS FA Bn commander conducts inspections and visits.

Component B: Subordinate leaders and staff demonstrate understanding of the critical elements of their own mission, the DS FA Bn mission, the DS FA Bn commander's intent, and mission essential tasks through rehearsals.	Adequate	Marginal	Not Adequate
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Assessment Statements

- DS FA Bn rehearsal technique (e.g., small-scale, TEWT, or dress rehearsal) is appropriate for the time available.
- Rehearsal tasks are prioritized to ensure that participants demonstrate acceptable levels of competence on key/critical tasks.
- The number of DS FA Bn systems participating in the rehearsal is appropriate to the amount of time and space available.
- Members of the DS FA Bn provide relevant information and demonstrate their actions as summarized in Table 6.
- Rehearsal is as realistic as conditions allow:
 - Enemy is replicated accurately.
 - Brigade operations are replicated accurately.
 - If time allows, the rehearsal includes both an initial walk-through with actions explained and a subsequent iteration at near combat speed with minimal guidance.
 - Technical rehearsal is also conducted, either independently or in conjunction with the DS FA Bn rehearsal.
 - Plan is integrated with respect to all BOS.

OUTCOME 6 DIAGNOSTIC AID

OUTCOME 6: Subordinate leaders demonstrate an understanding of the critical elements of their own mission, the DS FA Bn mission, the DS FA Bn commander's intent, and mission essential tasks.

Task Elements

Component A: Subordinate leaders demonstrate a clear understanding of the concept of operations through backbriefs.

4. **The direct support field artillery battalion commander directs changes to the operation or plan.** [TRADOC Pam 11-9, Chap 7 and App D]
 - 4h. The DS FA battalion commander takes actions to ensure that subordinate leaders have a clear understanding of his intent and concept. [FM 101-5, pp. 4-59/60]
 - 4h2 The DS FA battalion commander receives a confirmation briefing from subordinate leaders.
5. **The direct support field artillery battalion commander directs and leads subordinate forces.** [TRADOC Pam 11-9, Chap 7 and App D]
 - 5b. The DS FA battalion commander and staff coordinate and integrate tactical operations through backbriefs. [FM 101-5, pp. 4-59, 4-60]
 - 5b1 The DS FA battalion commander conducts backbriefs with the DS FA battalion staff and subordinate commanders.
 - a) During and after the DS FA battalion commander's inspections and visits.
 - b) As directed by the DS FA battalion commander.
 - 5b2 During backbriefs, the DS FA battalion commander verifies that subordinates understand concept of operations.
 - 5b3 During backbriefs the DS FA battalion commander and subordinate commanders are responsible for:
 - a) Describing in detail how their schemes of maneuver and fires will be conducted.

- b) Describing how their concept of the operation supports the DS FA battalion commander's intent and contributes to the DS FA battalion mission.
 - c) Describing: the level of preparation achieved; preparation activities still not completed; and actions to be taken in order to adhere to the mission timelines.
- 5e. The DS FA battalion commander ensures that each BOS is integrated with other BOS during visits, backbriefs, and rehearsals. [FM 101-5, pp. H-36 - H-42]
- 5e1 The DS FA battalion commander determines the state of DS FA battalion preparedness through visits and inspections. [Battle Command, p. 10-15]
- a) The DS FA battalion commander personally visits and inspects units.
 - (1) Manages his time and prioritizes his visits so that he visits at least those units most critical to the execution of his intent and concentrates on those units and officers that demonstrate leadership weaknesses; assesses unit capabilities; checks/listens to be sure tasks are understood.
 - (2) Questions subordinate leaders down to section level and compares their concepts of the operation with his to ensure that the DS FA battalion plan is understood at all levels.
 - b) The DS FA battalion commander extends his command presence by directing members of his staff (DS FA battalion XO, CSM, or one or more DS FA battalion staff members) to perform inspections and visits.
 - c) Inspections and visits are scheduled; units may be informed of times.
 - (1) Inspections and visits do not significantly interfere with, delay, or artificially sequence subordinate units' combat preparations.
 - (2) The commander determines and outlines those items and activities he will inspect based on:
 - (a) Experience.
 - (b) In-depth knowledge of the DS FA battalion and its equipment.
 - (c) Assessment of the current status of the units.
 - (d) Items which serve as indicators of maintenance, readiness, or morale trends within the unit (appearance, signs of fatigue).

Component B: Subordinate leaders and staff demonstrate understanding of the critical elements of their own mission, the DS FA Bn mission, the DS FA Bn commander's intent, and mission essential tasks through rehearsals.

5. **The direct support field artillery battalion commander directs and leads subordinate forces.** [TRADOC Pam 11-9, Chap 7 and App D]
- 5c. The DS FA battalion commander and subordinates plan and prepare for rehearsals. [FM 101-5, App M; FM 71-3, pp. 3-23 - 3-29; FM 6-20-1, pp. 3-12 - 3-14]
- 5c2 DS FA battalion and reinforcing unit prepare for rehearsal. [FM 6-20-1, p. 3-12]
 - a) DS FA battalion, firing battery, and platoon FDCs and FSOs to the company level develop at least a tentative plan prior to their participation in a DS FA battalion rehearsal in order to allow effective feedback on the DS FA battalion plan.
 - b) Subordinate FDCs and FSEs conduct their own technical rehearsals and prepare vehicles, equipment, and soldiers prior to DS FA battalion rehearsals.
 - c) The DS FA battalion O&I elements pay particular attention to displacements. The DS FA battalion FDC issues fire orders and passes messages to observers.
 - d) If there is a mutual support unit, the two FDCs exercise transfer of control.
- 5d. The DS FA battalion conducts rehearsals.
- 5d1 The DS FA battalion conducts multiple rehearsals if time is available, to include contingency plans. [FM 101-5, p. M-15]
 - a) Combined arms maneuver rehearsal.
 - b) CSS/logistics rehearsal.
 - c) Fire support rehearsals.
 - (1) Brigade FS rehearsal.
 - (2) DS FA battalion technical rehearsal.
- 5d2 The DS FA battalion conducts realistic and thorough rehearsals; replicating the enemy accurately and: [FM 6-20-1, pp. 3-12 - 3-14]
 - a) A slow walk-through of the mission is performed, with staff and subordinate leaders explaining their actions at every step to ensure understanding; then, with minimal guidance and at combat speed.
 - b) Integration and coordination of the BOS are accomplished by rehearsing each element's movement and positioning to ensure that all elements can be in place at designated times and that elements' activities do not interfere with other units' activities.

- c) Rehearsals are conducted from the point of threat identification up to the point where the DS FA battalion is able to complete the mission and achieve the destruction of the enemy.
 - d) All DS FA battalion systems (vehicles, troops, combat multipliers) participate if time is available; representative portions of DS FA battalion systems participate if time or space is not available.
 - e) During the rehearsal, participants execute exactly as they would in combat.
- 5d3 The DS FA battalion commander controls and participates in the DS FA battalion rehearsal. [FM 6-20-1, pp. 3-12 - 3-14]
- a) Ensures that rehearsal meets his goals.
 - b) Briefs participants (or gives guidance to the S3 to brief) prior to the rehearsal.
 - (1) Introduces each participant with a brief description of his duties and roles for the mission.
 - (2) Provides an overview:
 - (a) Missions and tasks to be rehearsed.
 - (b) Sequence of activities rehearsed.
 - (c) Rehearsal timelines (e.g., time to rehearse each event/phase of the mission).
 - (d) Description of rehearsal site.
 - (3) The DS FA battalion commander verifies that subordinate commanders understand their mission. [FM 101-5, p. M-15]
 - c) Establishes the standards, outcomes, and goals to be achieved.
 - (1) Battery commanders, staff, FDCs and FSOs at all levels, and leaders fully understand their responsibilities within the parameters of the DS FA battalion commander's intent.
 - (2) Vulnerabilities in the plan are identified, and the means to mitigate them are determined.
 - (3) Checks are made to determine whether key aspects of the plan are feasible (e.g., observers confirm that they can see their targets; FDCs confirm that they have ballistic solutions to their targets).
 - d) Exercises the decision-making process he expects to be faced with during the mission:
 - (1) Identifies times or events during the mission which will require him to make decisions.
 - (2) Observes how his decisions are implemented by DS FA battalion units and the staff.
 - (3) Identifies the key decision points which are most likely to produce the outcomes which supports his intent and desired endstate.
 - e) Utilizes his decision-support aids (e.g., DST, synchronization matrix, FSEM).
 - (4) Tracks the effect of DS FA battalion actions to achieve the desired endstate (with DS FA battalion S3 assistance).
- 5d4 The DS FA battalion S3 participates in DS FA battalion rehearsals. [FM 6-20-1, p. 3-12]

- a) Describes overall operation.
 - b) Ensures that DS FA battalion fires are integrated in terms of timing to support brigade movement and maneuver.
 - c) Describes the positioning and movement of the DS FA battalion commander during the mission.
 - d) Describes the positioning and movement of DS FA battalion CPs during the mission.
 - e) Assists the DS FA battalion commander in tracking the effect of DS FA battalion actions to achieve the desired endstate.
- 5d5 The DS FA battalion S2 participates in DS FA battalion rehearsals. [FM 6-20-1, p. 3-12]
- a) Portrays enemy actions and responses.
 - (1) Replicates all plausible and possible events and activities.
 - (2) Ensures that enemy actions are properly depicted to the DS FA battalion commander, subordinate commanders and staff.
 - (3) Portrays actions of HPT and other activities at NAIs and TAIs.
 - (4) Briefs threats to batteries by phase. [FN-NTC]
 - b) Provides updated enemy and terrain information.
- 5d6 DS FA battalion FDO participates in the rehearsal. [FM 6-20-1, p. 3-12]
- a) Supervises tactical and technical fire direction.
 - b) Ensures that all FDCs compute fire commands and acknowledge fire support coordinating measures.
 - c) Develops and supervises input of appropriate parameters into fire direction computers.
 - d) Confirms that FDCs can compute ballistic solutions to targets.
- 5d7 The DS FA battalion S4 (representing CSS staff) participates in rehearsals. [FM 6-20-1, p. 3-12]
- a) Describes CSS support of the DS FA battalion.
 - b) Portrays positioning and movement of CSS assets.
- 5d8 FSO, FISTs, and COLTs. [FM 6-20-1, p. 3-12]
- a) Fire assigned targets.
 - b) Ensure that assigned missions, especially high-priority ones, like FPFs, are loaded into the buffers of forward entry devices (FED).
 - c) Point out and describe control measures (e.g., trigger lines and execution criteria), restrictions, and communications (primary and alternate) between observers and fire support elements which are practiced.

d) Ensure that company/team fire support plans comply with the commander's guidance.
e) Describe observer and back-up observer positioning, and responsibilities.

f) Ensure that indirect fires "triggers":

- (1) Are understood and demonstrated by observers.
- (2) Can be executed by the fire support system (e.g., FA, mortars, CAS) based on ranges and timing.
- (3) Are integrated with ground maneuver.

5d9 The DS FA battalion CMLO participates in DS FA battalion rehearsals. [FM 6-20-1, p. 3-12]

- a) Describes NBC decontamination support of the DS FA battalion (e.g., sites, equipment, procedures if other than SOP).
- b) Describes NBC reconnaissance support of the DS FA battalion.
- c) Portrays potential enemy use of chemicals against the DS FA battalion.
- d) Describes employment of smoke and other obscurants.

5d10 Battery commanders participate in DS FA battalion rehearsals. [FM 6-20-1, p. 3-12]

a) Describe their missions.

b) Demonstrate how they will accomplish their assigned mission.

- (1) Movement.
- (2) Positions (primary, alternate, subsequent).
- (3) Timing of moves, positioning, and execution of fires.
 - (a) Must ensure that movement is integrated with timeline of attack of critical targets.
 - (b) Confirm that required quantity and type of ammunition is available in the position required (i.e., FASCAM, smoke).

5d11 Time dependent, the entire operation is thoroughly rehearsed using one of the following techniques: [FM 71-3, pp. 3-23 - 3-29; FM 6-20-1, pp. 3-12 - 3-14]

a) Level I: small-scale rehearsals that do not involve mounted or dismounted maneuver. Techniques include:

- (1) Map: Limited number of participants due to map size, used when time and space constraints are limited.
- (2) Sand table/terrain model: Key leaders only, used to compensate for lack of sufficient time.
- (3) Rock/stick drill: Same characteristics as sand-table/terrain models, except that participants replicate their actions or their unit's actions.
- (4) Radio/telephone: Participants as directed by the DS FA battalion commander, used when time and enemy situations do not allow gathering of personnel; used to test radios and to determine backup systems in the event

of communications equipment failure. The technical fire support rehearsal will be conducted in this manner to test all digital devices.

- b) Level II: Focused rehearsals using selected personnel, usually key leaders, mounted in wheeled or tracked vehicles over similar terrain; technique used is tactical exercise without troops (TEWT), where key leaders participate, conducted on actual mission or similar terrain.
- c) Level III: Full-scale dress rehearsal involving use of real time, mounted and dismounted maneuver over actual mission or similar terrain.

5d12 The DS FA battalion commander, XO, S3, and other key staff officers conduct rehearsal after action reviews (AARs) to ensure that critical tasks are rehearsed to acceptable levels of competence. [FM 101-5, p. M-15, FM 6-20-1, p. 3-12]

OUTCOME 7 ASSESSMENT

OUTCOME 7: Soldiers and units are disciplined and motivated to accomplish the mission. (Use Table 7)

Component A: DS FA Bn commander and staff take actions to promote discipline and motivation.	Adequate	Marginal	Not Adequate
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Assessment Statements

- The DS FA Bn commander visits units that are most critical to the execution of the commander's intent and units with leadership weaknesses.
 - Makes a subjective assessment of cohesion, morale, and esprit.
 - Expedites actions, fixes problems, and refines standards.
- The DS FA Bn commander directs members of the staff to perform inspections and visits.
- The DS FA Bn commander's actions to maintain cohesion and discipline include:
 - Demanding compliance to standards and guidance.
 - Taking corrective action when shortfalls in performance are noted.
 - Praising noteworthy performance, or recognizing it in other ways.
 - Displaying a calm presence to subordinates.
 - Setting a personal example of ethical behavior.
 - Providing precise, simple orders.
 - Ensuring that subordinates get sufficient rest.
- Stress prevention actions by DS FA Bn leaders and staff include:
 - Complying with the DS FA Bn sleep plan.
 - Reporting signs of stress or battle fatigue of others.
 - Speaking positively concerning the DS FA Bn's missions, purposes and abilities.
 - Employing an information dissemination plan designed to quell and prevent rumors.
 - Ensuring that CSS systems meet legitimate needs (e.g., hot meals, mail, spare parts, ammunition).

Component B: DS FA Bn units and soldiers exhibit discipline and motivation; units perform cohesively.		Adequate	Marginal	Not Adequate
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- Morale and discipline indicators are within acceptable limits.
 - Uniform code of military justice violations.
 - Accident rates.
 - AWOL rates.
 - Sick call and stress casualties.
 - Inspector general complaints.
 - Feedback from the chaplain on leader and soldier concerns (indications of stress).
- Soldiers exhibit military courtesy and appearance.
- Soldiers work cooperatively within the unit and with other units to perform preparation tasks.
- Vehicles and equipment show evidence of consistent operator/crew maintenance.

OUTCOME 7 DIAGNOSTIC AID

OUTCOME 7: Soldiers and units are disciplined and motivated to accomplish the mission.

Task Elements

Component A: DS FA battalion commander and staff take actions to promote discipline and motivation.

5. **The direct support field artillery battalion commander directs and leads subordinate forces.** [TRADOC Pam 11-9, Chap 7 and App D]

5a. The DS FA battalion commander exercises leadership and maintains unit cohesion and discipline. [Battle Command, p. 11-15; FM 22-100, Chap 4, 5, and 6]

5a1 The DS FA battalion commander checks and ensures that orders are executed; reinforces discipline by demanding compliance to standards and his guidance.

5a2 The DS FA battalion commander observes subordinates:

- a) For indicators of shortfalls in performance or manner of performance, and takes corrective action as necessary.
- b) For noteworthy performance that he can praise and recognize in other ways.

5a3 The DS FA battalion commander displays a calm presence to subordinates while clearly delineating guidance and providing precise, simple orders, and instructions.

5a4 The DS FA battalion commander maintains a moral presence through ethical decision making and personal example.

5a6 The DS FA battalion commander continuously assesses risks to mission accomplishment and safety hazards during all phases of the operation.

Component B: DS FA Bn units and soldiers exhibit discipline and motivation; units perform cohesively.¹

¹ Observers should appraise engineer battalion personnel and units for indicators of morale, discipline, and cohesion

5. **The direct support field artillery battalion commander directs and leads subordinate forces.** [TRADOC Pam 11-9, Chap 7 and App D]
- 5a. The DS FA battalion commander exercises leadership and maintains unit cohesion and discipline. [Battle Command, p. 11-15; FM 22-100, Chap 4, 5, and 6]
- 5a2 The DS FA battalion commander observes subordinates:
 - a) For indicators of shortfalls in performance or manner of performance, and takes corrective action as necessary.
 - b) For noteworthy performance that he can praise and recognize in other ways.
- 5a5 The DS FA battalion commander monitors subordinates and himself for degradation of mental and physical capability. [Battle Command, pp. 27, 28]
 - a) DS FA battalion commander monitors his own physical and mental state and gets rest.
 - b) DS FA battalion XO monitors the DS FA battalion commander's and staff members' physical and mental state and recommends rest periods.
 - c) DS FA battalion commander ensures that subordinate commanders and staff are rested and prepared for battle.
- 5e. The DS FA battalion commander ensures that each BOS is integrated with other BOS during visits, backbriefs, and rehearsals. [FM 101-5, pp. H-36 - H-42]
- 5e1 The DS FA battalion commander determines the state of DS FA battalion preparedness through visits and inspections. [Battle Command, p. 10-15]
 - a) The DS FA battalion commander personally visits and inspects units.
 - (4) Makes a subjective assessment of cohesion, morale, and esprit.
 - (7) Informs DS FA battalion XO and his representatives inspecting preparations of any changes or refinements to the plan which he has directed.
 - b) The DS FA battalion commander extends his command presence by directing members of his staff (DS FA battalion XO, CSM, or one or more DS FA battalion staff members) to perform inspections and visits.

PRODUCT REVIEW MEASURES OF EFFECTIVENESS

The following tables and questions examine various aspects of directing and leading units during preparation for battle. Table 1 is about the operation and monitoring of communications nets. Table 2 is about the evaluation of the tactical situation used as the basis for the commander's estimate and detection of a need to change the plan. Table 3 concerns the updating of operations products during preparation for battle. Table 4 captures data relevant to timely distribution of orders. Table 5 provides a place to record whether all critical information was communicated among staff sections, key leaders, and headquarters of higher, adjacent and subordinate units. Table 6 addresses contributions of participants in the DS FA battalion rehearsal. Table 7 provides a set of measures of the DS FA battalion commander's overall leadership. Table 8 is concerned with the integration and coordination of the elements of combat power available to the artillery battalion.

Table 1. Operation and monitoring of communications nets during preparation phase.

Leave the block unmarked if communication was maintained to a degree that all information was transmitted and received. If non-critical information was lost because of interruptions in communication, enter an "M" (for Marginal performance). If critical information was not received, tag the incident by entering a number in sequence (1, 2, 3, ...) and then indicate below the table the nature of the critical information that *was not* received (use METT-T factors to describe the information that was not received).

Communication Nets	TOC	ALOC	BSOC
DS FA Bn Command (Voice)			
Brigade Command (Voice)			
Brigade Fire Support Nets (Voice and Digital)			
DS FA Bn Fire Direction Nets (Voice and Digital)			
DS FA Bn Operations/Fire (Digital)			
DS FA Bn Administrative & Logistics (A/L) (Voice)			
Division Artillery (DIVARTY) Command (Voice)			
DIVARTY Operations/Fire (Voice and Digital)			
Brigade A/L			

Briefly describe incidents of information not received (what METT-T information was not received and what happened because of this failure to communicate the information):

Table 2. Modifying DS FA Bn plan during the preparation phase.

This table guides the assessment of the DS FA Bn commander's and staff's performances in identifying information that will have an impact on the battalion's planned operation and their effectiveness in responding to identified situational change. A range of factors that are relevant to a battalion's situation and normal parts of an estimate of the situation are organized by METT-T. You may find it necessary to add other factors. The table is organized to record change to each METT-T factor, when the change was identified, and whether the response (e.g., change to the OPORD) was appropriate to the change in the situation. Rating begins with the second column. The first rating is whether the commander and staff had an accurate perception of each factor of the situation influencing the battle when the OPORD was issued. The second rating concerns whether factors of METT-T changed during the preparation phase before the start of the main battle. The third rating is concerned specifically with any change to the identified factors during or as a result of the rehearsal. The last column calls for the observer's judgment about whether the response made was appropriate to the situational change. For each case where the battalion did not detect the change, did not react, or seemed to react in an inappropriate manner, describe the impact of the reaction or lack of reaction in the section following the table.

METT-T Factors	Accurate at OPORD?	Change during Preparation Phase?	Change during rehearsal?	Appropriate response?
Mission				
Brigade commander's intent	Yes No	Yes No	Yes No	Yes No
DIVARTY commander's intent	Yes No	Yes No	Yes No	Yes No
DS FA Bn commander's intent	Yes No	Yes No	Yes No	Yes No
Brigade concept of the operation	Yes No	Yes No	Yes No	Yes No
Brigade concept of fires	Yes No	Yes No	Yes No	Yes No
Specific missions and tasks	Yes No	Yes No	Yes No	Yes No
Artillery task organization	Yes No	Yes No	Yes No	Yes No
Other:	Yes No	Yes No	Yes No	Yes No
Enemy Situation				
Activity	Yes No	Yes No	Yes No	Yes No
Locations	Yes No	Yes No	Yes No	Yes No

Table 2. (Continued)

METT-T Factors	Accurate at OPORD?	Change during Preparation Phase?	Change during rehearsal?	Appropriate response?
Identification of HPTs	Yes No	Yes No	Yes No	Yes No
Other:	Yes No	Yes No	Yes No	Yes No
Friendly Troops Location and Status				
Disposition and locations of brigade units	Yes No	Yes No	Yes No	Yes No
Disposition and locations of FA and other fire support assets	Yes No	Yes No	Yes No	Yes No
Disposition and locations of target acquisition and collection systems	Yes No	Yes No	Yes No	Yes No
Location and status of artillery radar	Yes No	Yes No	Yes No	Yes No
Equipment and personnel status of FA units	Yes No	Yes No	Yes No	Yes No
Ammunition status	Yes No	Yes No	Yes No	Yes No
TF fire plans and target lists	Yes No	Yes No	Yes No	Yes No
Status of HPTs	Yes No	Yes No	Yes No	Yes No
CSS capabilities to sustain fire support	Yes No	Yes No	Yes No	Yes No
Other:	Yes No	Yes No	Yes No	Yes No
Terrain (Area of Operations)				
Weather effects on meteorological calculations	Yes No	Yes No	Yes No	Yes No
Weather effects on movement	Yes No	Yes No	Yes No	Yes No
Terrain effects on movement	Yes No	Yes No	Yes No	Yes No
Terrain effects at firing positions	Yes No	Yes No	Yes No	Yes No
Other:	Yes No	Yes No	Yes No	Yes No

Table 2. (Continued)

METT-T Factors		Accurate at OPORD?	Change during Preparation Phase?	Change during rehearsal?	Appropriate response?
Time					
Time for units to complete preparations		Yes No	Yes No	Yes No	Yes No
Time to coordinate fire support missions		Yes No	Yes No	Yes No	Yes No
Times to execute planned events		Yes No	Yes No	Yes No	Yes No
Other:		Yes No	Yes No	Yes No	Yes No
DS FA Bn commander's overall METT-T assessment		Yes No	Yes No	Yes No	Yes No
DS FA Bn's ability to execute mission		Yes No	Yes No	Yes No	Yes No
DS FA Bn's ability to support brigade forces in contact		Yes No	Yes No	Yes No	Yes No

Impact of inappropriate reactions to METT-T changes:

Change	How battalion reacted	Consequences of reaction (or lack of reaction)

Table 3. Updates of operations products during preparation phase.

This table is intended to show whether each CP and section maintained accurate and current operations products. Products listed may be employed by the battalion headquarters to update and collate information so that appropriate actions may be taken to conduct a synchronized battle. Some of these items are not required by doctrine or unit TSOP, so circle "N/A" if the item was not required by the TSOP or the particular CP. If the item was required, then circle "Yes" if it was continually updated to be accurate and current or "No" if it wasn't. On the following page, briefly state the consequences of any inaccurate or out-dated information reflected on a particular product. (There may be no consequences or impact in some instances.)

Products that may be employed by the DS FA battalion:	TOC	ALOC	BSOC
Operations overlay (DS FA Bn, brigade, adjacent units, and fire support units in the brigade sector)	N/A Yes No	N/A Yes No	N/A Yes No
Intelligence overlay	N/A Yes No	N/A Yes No	N/A Yes No
Situation template overlay	N/A Yes No	N/A Yes No	N/A Yes No
Event template overlay	N/A Yes No	N/A Yes No	N/A Yes No
Modified combined obstacle overlay (MCOO)	N/A Yes No	N/A Yes No	N/A Yes No
Fire support overlays	N/A Yes No	N/A Yes No	N/A Yes No
Decision support template (DST)	N/A Yes No	N/A Yes No	N/A Yes No
Synchronization matrix	N/A Yes No	N/A Yes No	N/A Yes No
Attack guidance matrix	N/A Yes No	N/A Yes No	N/A Yes No
High payoff target list (HPTL)	N/A Yes No	N/A Yes No	N/A Yes No
Fire support execution matrix (FSEM)	N/A Yes No	N/A Yes No	N/A Yes No
Position area overlay (artillery battery positions within brigade area)	N/A Yes No	N/A Yes No	N/A Yes No
Situation posted on appropriate maps	N/A Yes No	N/A Yes No	N/A Yes No
NBC overlay	N/A Yes No	N/A Yes No	N/A Yes No

Table 3. (Continued)

Products that may be employed by the DS FA battalion:		TOC		ALOC		BSOC	
Consolidated XO report status		N/A	Yes No	N/A	Yes No	N/A	Yes No
Disposition of collection assets/target acquisition overlay		N/A	Yes No	N/A	Yes No	N/A	Yes No
Fire support coordination measures (including airspace coordination)		N/A	Yes No	N/A	Yes No	N/A	Yes No
Plans map (with overlays for future operations)		N/A	Yes No	N/A	Yes No	N/A	Yes No
Journals/logs		N/A	Yes No	N/A	Yes No	N/A	Yes No
CSS situation map and overlay		N/A	Yes No	N/A	Yes No	N/A	Yes No
Timeline and status of DS FA Bn preparation activities		N/A	Yes No	N/A	Yes No	N/A	Yes No
Other (1) _____		N/A	Yes No	N/A	Yes No	N/A	Yes No
Other (2) _____		N/A	Yes No	N/A	Yes No	N/A	Yes No

For the products that are marked No, describe the impact (if any) of the inaccurate or out-dated information on mission execution:

CP	Product	Inaccurate/out-dated information	Impact on mission execution

Table 4. Times orders were received.

This table concerns the timeliness of WARNOs and FRAGOs in cases where the DS FA battalion changes the plan during the preparation phase. (Tables 2 and 3 complement Table 4.) First, record the date and time when the commander decided to change the plan. Then identify which units should receive WARNOs and FRAGOs and write in designators for batteries, additional subordinate elements, adjacent units, and supporting units. Finally, list the date and time each unit received each order.

Date/Time DS FA Bn commander decided to change plan: _____

Unit	WARNO	Initial FRAGO	Final FRAGO (if issued)
HHB	Date: Time:	Date: Time:	Date: Time:
Firing Battery A	Date: Time:	Date: Time:	Date: Time:
Firing Battery B	Date: Time:	Date: Time:	Date: Time:
Firing Battery C	Date: Time:	Date: Time:	Date: Time:
Service Battery	Date: Time:	Date: Time:	Date: Time:
DS FA Bn Staff	Date: Time:	Date: Time:	Date: Time:
Brigade FSO/FSE	Date: Time:	Date: Time:	Date: Time:

Table 4. (Continued)

Unit	WARNO	Initial FRAGO	Final FRAGO (if issued)
TF FSOs	Date: Time:	Date: Time:	Date: Time:
Reinforcing Artillery Bns	Date: Time:	Date: Time:	Date: Time:
Other Attached/Subordinate Units	Date: Time:	Date: Time:	Date: Time:
Engineer Bn	Date: Time:	Date: Time:	Date: Time:
DIVARTY	Date: Time:	Date: Time:	Date: Time:
FSB	Date: Time:	Date: Time:	Date: Time:
Other Bde Units: _____	Date: Time:	Date: Time:	Date: Time:
Adjacent Unit: _____	Date: Time:	Date: Time:	Date: Time:
Adjacent Unit: _____	Date: Time:	Date: Time:	Date: Time:
Supporting Units: _____	Date: Time:	Date: Time:	Date: Time:

Table 5. Communication among staff sections, higher, adjacent, and subordinate units.

Complete this table by tagging each incident in which critical information was NOT communicated from one element to another. The DS FA Bn key personnel are indicated in the horizontal row at the top of the table. Listed vertically in the left column are the same positions followed by key personnel external to the battalion. Each occurrence of failure to communicate should be given an identification number on the chart for reference purposes. Insert a number for identification (in sequence: 1, 2, 3,...) in the appropriate cell. Following the table is space for notes on the nature of the problem. EXAMPLES OF USE: a) If in the first incident of failure to communicate during an exercise, the Bn S2 had failed to inform the Bn commander (Cdr) and the Bn S3 about change to enemy capabilities, the observer would annotate "1" in the cells at the intersection of the S2 vertical column and the horizontal row for the Bn commander and the Bn S3. In the foregoing example, the observer might also record at the end of the table, "1: Bn S2 did not appear to recognize significance of movement forward of enemy artillery units." b) If the second incident of failure to communicate was that the FA Bn S4 had not provided a report to the DAO, the observer would annotate "2" in the cell at the intersection of the Bn S4 column and the DAO row. The clarifying note would show "2: Batteries failed to provide CL V status to Bn ammo (ammunition) officer; required report not submitted to DAO." c) If in a third incident, the Service Battery commander had failed to communicate with the B battery commander about a support matter, the observer would annotate "3" at the intersection of the Service Battery vertical column and the B Battery row. The clarifying note at the bottom of the table might show, "3: Service Battery commander radio problem prevented timely transmission of information about a decontamination site opening at Grid ____." d) If the fifth incident was the inability of the DIVARTY S1 to provide information on replacements to the Bn S1, the observer would annotate "5" in the cell formed at the intersection of the DIVARTY S1 row and the Bn S1 column. The note might reflect "5: Replacements arrived without warning. Unknown at this time why DIVARTY S1 failed to inform Bn S1."

Table 5. (Continued)

	DS FA Bn Cdr	DS FA Bn CSM	DS FA Bn S1	DS FA Bn S2	DS FA Bn S3	DS FA Bn S4	DS FA Bn XO	HQ and HQ Battery	Service Battery	DS FA Bn Survey Officer	DS FA Bn Ammo Officer	DS FA Bn FDO	A Battery Cdr	B Battery Cdr	C Battery Cdr
Internal communications:															
DS FA Bn Cdr															
DS FA Bn CSM															
DS FA Bn S1															
DS FA Bn S2															
DS FA Bn S3															
DS FA Bn S4															
DS FA Bn XO															
HQ and HQ Battery															
Service Battery															
DS FA Bn Survey Officer															
DS FA Bn Ammo Officer															
DS FA Bn FDO															
A Battery Cdr															
B Battery Cdr															
C Battery Cdr															

Table 5. (Continued)

	DS FA Bn Cdr	DS FA Bn CSM	DS FA Bn S1	DS FA Bn S2	DS FA Bn S3	DS FA Bn S4	DS FA Bn XO	HQ and HQ Battery	Service Battery	DS FA Bn Survey Officer	DS FA Bn Ammo Officer	DS FA Bn FDO	A Battery Cdr	B Battery Cdr	C Battery Cdr
External communications:															
Brigade Cdr															
Brigade S3															
Brigade FSO/FSE															
TF A FSO															
TF B FSO															
TF C FSO															
Engineer Bn Cdr															
FSB Cdr															
Division Ammo Officer (DAO)															
Div FSE															
DIVARTY Cdr															
DIVARTY CSM															
DIVARTY S1															
DIVARTY S2															
DIVARTY S3															
DIVARTY S4															

Table 5. (Continued)

Briefly describe incidents of information not received (what critical information was not received and what happened because of this failure to communicate the information):

[illegible]

Table 6. Field artillery battalion rehearsal participants.

This table is based on doctrinal descriptions of rehearsals. It reflects likely participants in a DS FA Bn rehearsal and their roles or expected contribution to the conduct and the outcome of the rehearsal. This table was designed to capture rehearsal participants' contribution to the rehearsal. For each potential participant in the rehearsal, indicate whether he or she was present, whether the projected contributions were made, and if they were adequate.

Participant	Present?	Role and anticipated contribution	Adequate contribution?
DS FA Bn Cdr	Yes No	Control and participate. Make decisions relevant to refinement of plans. Brief participants prior to rehearsal. Establish standard and outcome/goals to be achieved. Exercise decision-making process anticipated for mission. Track the effect of DS FA battalion actions.	Yes No NA
Battery Cdrs _____ _____ _____	Yes No Yes No Yes No	Describe their missions. Demonstrate movement. Demonstrate primary, alternate, and subsequent positions. Demonstrate timing of moves. Demonstrate positioning. Demonstrate execution of fires.	Yes No NA Yes No NA Yes No NA
DS FA Bn S3	Yes No	Describe overall operation. Check and adjust DS FA Bn fires so that they are synchronized in terms of timing to support brigade movement and maneuver. Describe positioning and movement of the DS FA Bn commander during the mission. Describe positioning and movement of DS FA Bn CPs during the mission. Assisted in tracking the effect of DS FA Bn actions.	Yes No NA
DS FA Bn S2	Yes No	Portray enemy actions and responses. Provide updated enemy and terrain information.	Yes No NA

Table 6. (Continued)

Participant	Present?	Role and anticipated contribution	Adequate contribution?
DS FA Bn FDO	Yes No	Supervise tactical and technical fire direction. Check that FSCMs are accurately entered into AFATDS or tactical fire direction system (TACFIRE). Develop and supervise input of parameters in fire direction computers. Confirm that FDCs can compute ballistic solutions to targets.	Yes No NA
DS FA Bn S4	Yes No	Describe CSS of DS FA battalion. Portray positioning and movement of CSS assets.	Yes No NA
FSO	Yes No	Demonstrate firing of assigned targets. Check to be sure that assigned missions were loaded into the buffers of forward entry devices.	Yes No NA
FISTs	Yes No	Demonstrate control measures between observers and fire support elements.	Yes No NA
	Yes No	Check company (Co)/technical manual (TM) fire support plans to be sure that they comply with the Cdr's guidance.	Yes No NA
COLTs	Yes No	Describe observer and back-up observer positioning and responsibilities.	Yes No NA
	Yes No	Ensure that indirect fire triggers are demonstrated by observers, can be executed the fire support system (ranges and timing), and are synchronized with ground maneuver.	Yes No NA
DS FA Bn CMLO	Yes No	Describe NBC decontamination support of the DS FA battalion (procedures other than SOP). Describe NBC reconnaissance support of the DS FA battalion. Portray potential enemy use of chemicals against the DS FA battalion. Describe employment of smoke and other obscurants.	Yes No NA

Table 7. DS FA Bn leadership.

This table is designed to capture aspects of the brigade commander's leadership during mission preparation. Process statements are used to describe an aspect of the planning process. A numerical scale is included to identify the degree of proficiency to which the process was accomplished. Circling "1" on the scale means the task was not accomplished. ("2" and "3" are provided to differentiate between extremes.) Circling "2" means the task was poorly accomplished; "3" indicates the task was accomplished but requires training. Circling "4" means the task was performed in accordance with (IAW) doctrine. The paragraphs under the process statements are "anchors" to guide the assessor when determining whether the process statements were accomplished. The "anchors" are not meant to be all inclusive.

DS FA Bn commander did not check to see that his orders were carried out.	1	2	3	4	DS FA Bn commander checked to see that his orders were carried out.
DS FA Bn commander was not receptive to new information.	1	2	3	4	DS FA Bn commander sought and accepted new information.
DS FA Bn commander guidance and directives to staff had too little or too much detail.	1	2	3	4	DS FA Bn commander gave the staff the guidance and directives they needed.
DS FA Bn commander did not keep soldiers informed of the current situation.	1	2	3	4	DS FA Bn commander kept soldiers informed of the current situation.
DS FA Bn commander did not share hardships and dangers of his soldiers.	1	2	3	4	DS FA Bn commander did share hardships and dangers of his soldiers.
DS FA Bn commander did not ensure that soldiers had the opportunity to rest and eat as conditions permitted.	1	2	3	4	DS FA Bn commander ensured that soldiers had the opportunity to rest and eat as conditions permitted.

Table 8. Integration and coordination of combat, combat support, and combat service support.

Intent of this table is to record the DS FA Bn commander's and staff's ability before the battle to integrate and coordinate the elements of combat power represented by combat, combat support, and combat service support capabilities available to the DS FA Bn. "Integrated" and "coordinated" mean that the activities of the available elements of combat power can each be brought to bear on the battlefield at the appropriate times with the result that each is available to influence mission accomplishment as envisioned by the DS FA Bn commander. The commander's and staff's actions during the preparation phase must cause the elements of combat power to be deconflicted vertically, horizontally, and within the BOS to ensure that they can be brought together in a harmonious order or relationship during the battle. (Subsequent to this integration and coordination, the brigade commander will synchronize the capabilities of all of the elements of the brigade combat team.) Circle the response appropriate for the integration and coordination for each element of combat power. For those elements of combat power listed in the table but not available to the DS FA Bn, the observer should circle "N/A".

Considerations	Integrated and Coordinated?
Intelligence, e.g.: - Positioning, operating parameters for radars - Acquisition of information	Yes N/A No
Command and Control, e.g.: - Communications networks - CP locations - Location of Bn Cdr (demands of FA Bn command vs. Bde FSCoord) - Rehearsals' schedules	Yes N/A No
Maneuver, e.g.: - Movement - Deconfliction of positioning	Yes N/A No

Table 8. (Continued)

Considerations	Integrated and Coordinated?
Fire Support, e.g.: • FSCMs • Joint air attack team (JAAT) • SEAD • Naval surface fires (NSF) (if available) • Rear area combat operations (RACO) • Positioning of observers • FASCAM • TFs' fire plans	Yes N/A No
Mobility and Survivability, e.g.: • Breaches and crossings • Survivability positions • Decontamination sites	Yes N/A No
Air Defense, e.g.: • Combined arms for air defense (CAFAD) • Air defense artillery (ADA) protection	Yes N/A No
Combat Service Support, e.g.: • Vehicle and equipment recovery and repair • Delivery of CL V • Emergency resupply • Stockpiling and caches	Yes N/A No

REFERENCES

Field Manuals (FMs)

- | | |
|---------|---|
| 6-2 | Tactics, Techniques, and Procedures for Field Artillery Survey, September 1993 |
| 6-20 | Fire Support in the AirLand Battle, May 1988 |
| 6-20-1 | The Field Artillery Cannon Battalion, November 1990 |
| 6-20-40 | Fire Support for Brigade Operations (Heavy), January 1990 |
| 6-20-50 | Fire Support for Brigade Operations (Light), January 1990 |
| 6-40 | Tactics, Techniques, and Procedures for Field Artillery Manual Cannon Gunnery, April 1996 |
| 22-100 | Military Leadership, July 1990 |
| 34-130 | Intelligence Preparation of the Battlefield, July 1994 |
| 63-20 | Forward Support Battalion, February 1990 |
| 71-3 | Armored and Mechanized Infantry Brigade, 8 January 1996 |
| 71-100 | Division Operations, June 1990 |
| 100-5 | Operations, June 1993 |
| 101-5 | Command and Control for Commanders and Staff, "Final Draft" August 1993 |

Army Training and Evaluation Programs (ARTEPs)

- | | |
|--------------|---|
| 3-117-40-MTP | Mission Training Plan for Chemical Section and NBC Center, September 1994 |
| 6-115-MTP | MTP for Field Artillery Cannon Battalion Headquarters and Headquarters Battery, Headquarters, Headquarters and Service Battery; or Service Battery, November 1990 |
| 6-115-20-MTP | MTP for the Field Artillery Cannon Battalion Fire Support, January 1990 |
| 71-3-MTP | MTP for the Heavy Brigade Command Group and Staff, October 1988 |

U.S. Army Training and Doctrine Command (TRADOC) Pamphlet (Pam)

11-9

Blueprint of the Battlefield, May 1991

OTHER REFERENCES

Battle Command: Leadership and Decision Making for War and Operations Other than War,
Battle Command Laboratory, Fort Leavenworth, KS, April 1994

BATTLEFIELD FUNCTIONS

BF 15, Task Analysis for Coordinate, Synchronize, and Integrate Fire Support as Accomplished
by a Brigade Combat Team, Bartholomew J. McIlroy, Jr., William J. Mullen, III, J. Douglas
Dressel, and Franklin L. Moses, August 1996

Appendix A

ACRONYMS AND ABBREVIATIONS

A2C2	Army airspace command and control
AAR	after action review
ACA	airspace coordination area
ADA	air defense artillery
AFATDS	advanced field artillery tactical data system
AG	adjutant general
AGM	attack guidance matrix
A/L	administrative/logistics
ALO	air liaison officer
ALOC	administration and logistics operation center
ammo	ammunitions
AN	author note
AO	area of operations
App	appendix
ARI	U.S. Army Research Institute for the Behavioral and Social Sciences
ARTEP	Army Training and Evaluation Program
ASL	available supply list
ASP	ammunition supply point
ASR	alternate supply route; available supply rate
ATI	artillery target intelligence

ATO	air tasking order
ATP	ammunition transfer point
AWOL	absent without leave
AXP	ambulance exchange point
BDA	battle damage assessment
BF	battlefield function
BMO	battalion maintenance officer
Bn	battalion
BOS	battlefield operating system(s)
BSA	brigade support area
BSOC	battalion support operations center
Btry	battery
CAFAD	combined arms for air defense
CAS	close air support
CCF	critical combat function
CCIR	commander's critical information requirements
Cdr	commander
CL	Class
CL III	petroleum, oils, lubricants
CL V	ammunition
CL VIII	medical material

CL IX	repair parts and components
CMLO	chemical officer
Co	company
COA	course of action
COLT	combat observation lasing team
CONOPS	continuous operations
CP	command post
CPX	command post exercise
CS	combat support
CSM	command sergeant major
CSR	controlled supply rate
CSS	combat service support
DAO	division ammunition officer
Div	division
DIVARTY	division artillery
DMMC	division material management center
DPICM	dual purpose improved conventional munitions
DS	direct support
DST	decision support template
DTDD	Directorate of Training and Development Doctrine
EA	engagement area
EEFI	essential elements of friendly information

EPW	enemy prisoner of war
ETAC	enlisted terminal attack controller
EW	electronic warfare
FA	field artillery
FAC	forward air control
FARP	forward arming and refuel point
FASCAM	family of scatterable mines
FASP	field artillery support plan
FDC	fire direction center
FDO	fire direction officer
FED	forward entry device
FFIR	friendly force information requirements
FIST	fire support team
FIST-V	fire support team vehicles
FM	field manual
FN	field note
FO	forward observer
FPF	final protective fire
FRAGO	fragmentary order
FS	fire support
FSB	forward support battalion
FSCL	fire support coordination line

FSCM	fire support coordinating measure
FSCoord	fire support coordinator
FSE	fire support element
FSEM	fire support execution matrix
FSO	fire support officer
FTX	field training exercise
FXXITP	Force XXI Training Program
GS	general support
GSR	general support reinforcing
HHB	headquarters and headquarters battery
HPT	high payoff target
HPTL	high payoff target list
HQ	headquarters
IAW	in accordance with
IFSAS	improved fire support automation system
IG	inspector general
INTSUM	intelligence summary
IPB	intelligence preparation of the battlefield
IR	information requirement
ITTBBST	Innovative Tools and Techniques for Brigade and Below Staff Training

JAAT	joint air attack team
LD	line of departure
LNO	liaison officer
LOGPAC	logistics package
LP	listening post
MCOO	modified combined obstacle overlay
MDMP	military decision-making process
METT-T	mission, enemy, terrain, troops, and time available
MIJI	meaconing, intrusion, jamming, and interference
MOPP	mission oriented protective posture
MOS	military occupational specialty
MP	military police
MSB	main support battalion
MSC	major subordinate command
MSR	main supply route
MTP	mission training plan
MWR	morale, welfare, and recreation
NAI	named area of interest
NBC	nuclear, biological, and chemical
NBCWRS	nuclear, biological, and chemical warning and reporting system

NCOIC	noncommissioned officer in charge
NCS	net control station
NFA	no fire area
NGLO	naval gunfire liaison officer
NMC	non mission capable
NSF	naval surface fires
NTC	National Training Center
O&I	operations and intelligence
OB	order of battle
OP	observation post
OPFOR	opposing force
OPORD	operations order
OPSEC	operations security
PA	physician's assistant
Pam	pamphlet
PERSTATREP	personnel status report
PIR	priority intelligence requirement
PLL	prescribed load list
Plt	platoon
POL	petroleum, oil, and lubricants
PSNCO	personnel services noncommissioned officer

R&S	reconnaissance and surveillance
RACO	rear area combat operations
RAP	rocket assisted projectile
RFL	restrictive fire line
RSO	reconnaissance and survey officer
S1	Adjutant/Personnel Officer, Brigade and Battalion Staff
S2	Intelligence Officer, Brigade and Battalion Staff
S3	Operations and Training Officer, Brigade and Battalion Staff
S4	Supply/Logistics Officer, Brigade and Battalion Staff
SALT	supporting arms liaison team
SEAD	suppression of enemy air defenses
SIR	specific information requirements
SIT TEMP	situation template
SITREP	situation report
SJA	staff judge advocate
SO	signal officer
SOI	signal operation instructions
SOP	standing operating procedure
SOR	specific orders and requests
TAC	tactical
TACFIRE	tactical fire direction system

TAI	target area of interest
TEWT	tactical exercise without troops
TF	task force
TM	technical manual
TOC	tactical operations center
TRADOC	U.S. Army Training and Doctrine Command
TSOP	tactical standing operating procedures
UAV	unmanned aerial vehicle
UCMJ	uniform code of military justice
UMCP	unit maintenance collection point
USAARMC	U.S. Army Armor Center
USAFAS	U.S. Army Field Artillery School
WARNO	warning order
WSRO	weapons systems replacement operations
XO	executive officer