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Assessing Leader Cognitive Skills with Situational Judgment Tests: Construct Validity Results

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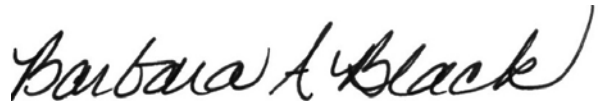
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ASSESSING LEADER COGNITIVE SKILLS WITH SITUATIONAL JUDGMENT TESTS: CONSTRUCT VALIDITY RESULTS

EXECUTIVE SUMMARY

Research Requirement:

The present research was conducted as part of the U.S. Army Research Institute's (ARI) internal work program that is focused on science of learning objectives. A first step in determining effective methods for using distributed learning (dL) to train different echelons and skills is to develop empirically validated measures of student performance. Such measures would allow instructors to compare student performance across courses to determine program effectiveness. As a review of the literature revealed scant measures aimed at determining the cognitive skill levels achieved through training, we first developed two situational judgment tests (SJTs) to assess experienced Army leader cognitive skills at the company command and battalion staff echelons; see Leibrecht, Tucker, Haverty, Blankenbeckler, and Green (2009) for a report on the development of the SJTs. Second, to address the specific goal of the present research, we examined the construct validity of the measures. This report includes a discussion of the strengths and weaknesses of using SJTs in training contexts.

Procedure:

To accomplish the goal of the research, we collected data from 138 officers (primarily Captains) from the Maneuver Captain's Career Course (MC3). The SJTs were administered in pencil and paper format after the officers completed all of the course material relevant for that particular echelon - company command and battalion staff.

Findings:

Confirmatory factor analyses demonstrated that the best fitting models for both SJTs were ones in which adaptive skill and task performance were distinct constructs. For the company command SJT, there were psychometric and analytic issues with the items reflecting leadership behaviors (e.g., coaching/mentoring, counseling). Thus, these were omitted from the final model. For the battalion staff competencies SJT, a better-fitting model was one in which the leader behaviors and adaptive skill items loaded on the same latent variable. When examining the leadership items more closely, it appeared that these items measured adaptive skill.

Overall, the findings indicate that a SJT may be a practical and valid method for assessing leader adaptive and decision-making skills, especially when the data will be used to compare performance across individuals. Student feedback was highly favorable due to the scenario-based nature of the questions, and the standardization of scoring allows for group comparisons. The scenarios also could be used to facilitate discussions and as hip-pocket training throughout the MC3 rather than only as an assessment technique.

It is important to note some of the lessons learned and practical implications. The original measures were long; requiring one to two hours to complete. The length may have affected the results as some officers indicated that they were challenged to stay motivated to complete the SJTs. Additionally, the context in which the officers were administered the SJTs may have affected the results. It appeared that participant motivation was higher when the SJTs were administered in a large classroom setting that reflected a course assessment context (i.e., quiet with no distractions) rather than a research data collection effort where the context varied across the small groups. Finally, development and refinement of SJTs are resource intensive. As the scenarios are based on the contemporary operating environment, access to subject matter experts is critical to update the current scenarios or develop new scenarios to assess the underlying skills. Time is needed to gather the critical incidents to develop the scenarios, to pilot test the scenarios, and to make refinements.

Additional research is needed to examine whether the SJTs will yield similar results when administered to other samples. As the SJTs were developed to assess the particular knowledge and skills of the MC3, the SJTs could be administered to new MC3 students or to course graduates to provide the necessary data to retest these conceptual models. Ideally, we would like to demonstrate that the models predict longer-term performance, possibly using ratings of officer performance as they progress through their careers.

Utilization and Dissemination of Findings:

While the sampling approach was limited, the results suggest that the measures are a good first step in providing the type of data needed to compare student performance across courses. As the SJTs provide standardized performance data, instructors could use the measures to determine the effectiveness of specific learning environments (e.g., distributed versus face-to-face). The initial SJT development and subsequent findings were briefed to the Deputy Director for Training, Doctrine, and Combat Development, U.S. Army Armor Center; Commander, 3d Squadron, 16th Cavalry Regiment; Chief of Tactics, Combined Arms and Tactics Directorate (CATD), US Army Infantry School; and Chief, Armor Professional Development Division, 3d Squadron, 16th Cavalry Regiment.

ASSESSING LEADER COGNITIVE SKILLS WITH SITUATIONAL JUDGMENT TESTS: CONSTRUCT VALIDITY RESULTS

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ASSESSING LEADER COGNITIVE SKILLS WITH SITUATIONAL JUDGMENT TESTS: CONSTRUCT VALIDITY RESULTS

Introduction and Background

Many challenges exist in measuring Army leaders' cognitive skills, especially skills related to mental agility and mental adaptability. Although many different approaches for training adaptability and related leader cognitive skills have been developed (e.g., Mueller-Hanson, Wisecarver, Dorsey, Ferro, & Mendini, 2009; Lussier, Shadrick, & Prevou, 2003; Vandergriff, 2006), the development of metrics for assessing these skills has received much less attention. One challenge is the difficulty in creating assessments that reflect the complex, ill-structured, and stressful nature of the contemporary operating environment (COE) in which leaders make decisions. A second challenge is the difficulty in creating assessments that provide standardized scores so that the data can be aggregated across individuals and used for purposes other than individual feedback, such as supporting programmatic change. Standardized assessments are appealing because they systematically and reliably test leader knowledge and skills using an automated scoring protocol; they do not require the ongoing support of subject matter experts (SMEs) to grade the assessments. Assessments that contain open-ended response formats (e.g., responses to essay questions, written or verbal plans for executing a mission) produce data that have to be judged by an SME as adequately meeting certain performance criteria. Although these types of assessments are critical for most Army courses to provide formative feedback to individuals, assessments with automated scoring can be useful supplemental methods to provide additional individual feedback or to provide data for programmatic or research purposes.

Situational judgment tests (SJTs) are standardized assessments that can be particularly relevant for the military context. Individuals are presented with scenarios of job-specific problems or challenges, usually developed from critical incidents, and then asked to make judgments about possible courses of action typically in a multiple choice format ("choose the best option;" e.g., McDaniel, Morgerson, Finnegan, Campion, & Braverman, 2001; Motowidlo, Dunnette, & Carter, 1990). As such, SJTs measure different kinds of procedural knowledge such as knowledge of handling interpersonal situations or knowledge about handling problem-solving situations; these different knowledge areas may have different antecedents and predict different performance domains (Motowidlo, Hooper, & Jackson, 2006). For the present research, the construct validity of two SJTs tapping the procedural knowledge related to three leader performance dimensions (adaptive skill, task performance, and leader task performance; cf. Conway, 2000; Tucker, Pleban, & Gunther, 2010) was examined.

SJT Development

The SJTs for the present research were developed to assess the knowledge and problem-solving skills of officers attending the Maneuver Captains Career Courses (MC3). Two SJTs were developed to assess competencies that were linked to the objectives of the course – one SJT for company command competencies and one for battalion staff competencies. Complete details of the development of the SJTs are provided in Leibrecht, Tucker, Haverty, Blankenbeckler, and Green (2009), but certain details regarding the methodological approach are particularly relevant

for the present research and are summarized here. Competencies were identified through multiple sources (class observations, interviews with subject matter experts, review of course materials, prior research on small unit leadership, etc.) and prioritized according to criticality, level of difficulty, and whether the competency was an objective of the course. After the final list of company command and battalion staff competencies was obtained, an exemplar SJT module for a selected competency was developed based on the process suggested by Burnfield, Waugh, Sinclair, Van Iddekinge, and Moriarty (2007) and Weekley, Ployhart, and Holtz (2006).

It is important to note that the SJT items were written to assess the officers' cognitive skills reflecting the first three levels of Bloom's *Taxonomy of Cognitive Objectives* (e.g., Bloom, Englehart, Furst, Hill, & Krathwohl, 1956). That is, for each module, several scenarios were written each increasing in difficulty and complexity first to assess the officers' ability to recall or retrieve specific knowledge (e.g., terminology, facts) acquired during the course and then to assess their comprehension or understanding of the meaning of this knowledge (see Table 1 for examples from two modules). Finally, some of the items required the officers to apply this knowledge to solve problems in novel situations such as choosing an appropriate course of action in response to an unanticipated event.

Table 1
Three Types of Questions for Two Company Command Modules

Question Type	Items
<i>Executing Cordon and Search</i>	
Recall	Cordon and search operations are most frequently an integral aspect of what phase of a clear-hold-build operation? (Circle the BEST answer)
Understanding	What basic methods did you consider in your plan to search the populated area of the village? (Circle ALL that apply)
Application	What missions and tasks did you assign to your security forces providing the inner cordon? (Circle ALL that apply)
<i>Performing METT-TC Analysis</i>	
Recall	Match the following terms with their definitions: specified task, implied task, essential task, constraint. (Place the definition # in the blank beside each term)
Understanding	You are still the commander of TM-D/4-99 Armor. Analyze your tasks in WARNO #2 and identify specified, implied, and essential tasks as well as any constraints. (Place the task # in the blank beside each term)
Application	You are the commander of TM-B/4-99 Armor. Select the BEST mission statement for your Team from the list below. (Circle the BEST answer)

Leader Performance Dimensions - Task Performance and Adaptive Skill

Leadership behaviors, and similarly, knowledge about how to perform those behaviors can be categorized using a multi-dimensional framework. For the purposes of the present research we drew from prior work and developed SJTs to measure either task performance or adaptive skill (c.f., Conway, 1999; Tucker, Gunther, & Pleban, 2010).

Task performance is defined as job-specific behaviors and responsibilities that sustain the technical core of the organization (e.g., Conway, 1999, Motowidlo & Van Scotter, 1994). Conway (1999) further distinguished these behaviors for managerial-level work as either technical-administrative behaviors or leadership behaviors. For Army leaders, technical-administrative behaviors reflect “core proficiencies” in technical abilities (e.g., knowledge of company operations and tactics) and in decision-making (c.f., US Army Cadet Command, 2002; US Department of the Army, 2006; US Department of the Army, 2009). Leadership behaviors include motivating subordinates, evaluating, and setting a developmental climate (Conway, 1999). Army leaders perform these behaviors when they identify the training needs of their subordinates and foster a learning, developmental, and professional climate within their units (US Department of the Army, 2009).

Adaptive skill has been defined as both proactive *and* reactive behavior, such that individuals who possess a high level of adaptive skill can perceive the need to change even though the situation has not changed yet (Ployhart & Bliese, 2006). Mid-grade Army leaders are “able to apply design to address complex and ill-defined problems and rapidly determine innovative and adaptive solutions” (US Department of the Army, 2009, p. 3). Interviews with small unit leaders revealed that the majority of adaptive behaviors performed in combat reflected the following:

- Dealing with uncertain and unpredictable situations - changes roles, responsibilities, plans and actions (e.g., engages in stability and support operations to combat and vice versa), alters timelines;
- Solving problems creatively - uses equipment in unique ways (outside of doctrine), positions forces strategically, synthesizes multiple sources of information and different perspectives, generates multiple alternatives for accomplishing the same mission; and
- Handling emergency or crisis situations - deals with casualties, makes decisions and performs effectively in life-threatening situations (Tucker & Gunther, 2009).

A review of U.S. Army doctrine revealed that leaders are required to possess certain values, knowledge, skills, and attributes reflecting adaptive qualities. Although a complete historical review of this doctrine is beyond the scope of this report, several key documents were reviewed and cited by Tucker, Gunther, Pleban, Goodwin, and Vaughan (2007) that instruct leaders to:

- (1) Demonstrate creative thinking, adopt a systems perspective, and quickly recognize and respond to changes in the situation
- (2) Delegate decision-making responsibilities to subordinates to encourage initiative
- (3) Communicate commander's intent so that subordinates will respond adaptively in uncertain situations
- (4) Understand nonlinearity and the unintended consequences of decisions and incorporate flexibility into plans
- (5) Use intuitive decision-making approaches in addition to the analytic military decision-making process (MDMP).

Present Research

As the SJTs were originally developed to specifically assess the knowledge and skills acquired throughout the Maneuver Captain's Career Course (MC3), data were collected from officers attending this course. In contrast to the report that describes the development of the SJTs (Leibrecht et al., 2009) and categorizes the modules according to specific types of knowledge, the present research categorizes the modules according to adaptive skill, task performance, and leadership behaviors based on the findings of prior work on leadership performance (Tucker, Gunther, & Pleban, 2010). As empirical evidence supports these distinct dimensions of leader skills and behaviors, it is important to develop assessment tools that provide the necessary data to inform Army training developers and instructors. That is, an overall assessment of leadership that does not consider these distinct dimensions may mask skill areas in which leaders are in need of additional training.

However, as limited work has investigated the use of SJTs to assess Army leader knowledge and skills, it is unclear whether this type of assessment is the most appropriate tool for assessing all three dimensions. It is possible that the scenario-based approach is not the best measure of certain leadership behaviors. It is important for training developers and instructors to know for which skill sets SJTs are useful and appropriate measures. Thus, the present research posed the following research questions regarding the validation results.

Research Question 1. For the Company Command Competencies SJT, does a three-factor model of leader cognitive skills (technical-administrative behaviors, leadership behaviors, and adaptive skill) as distinct dimensions fit the data better than a general one-factor model and other alternative nested models?

Research Question 2. For the Battalion Staff Competencies SJT, does a three-factor model of leader cognitive skills (technical-administrative behaviors, leadership behaviors, and adaptive skill) as distinct dimensions fit the data better than a general one-factor model and other alternative nested models?

Company Command Competencies SJT Validation

The Company Command Competencies SJT consisted of twenty modules that were developed to assess the competencies determined to be the most critical for company commanders. The modules covered a broad spectrum of practical problems facing commanders of Mechanized Infantry and Armor company/teams in the COE. However, each module related to one of the leader behavior dimensions described previously: task-administrative behaviors, leadership behaviors, adaptive skill behaviors (see Table 2).

A main focus of the MC3 is to teach Captains warfighting processes and solutions such as how-to-fight principles in achieving mission success. As such, more than half of all of the modules reflected the *technical-administrative behaviors* dimension. All of these modules reflected either technical (e.g., necessary expertise to accomplish tasks and functions), tactical (e.g., proficiency in required professional knowledge, judgment, and warfighting), decision-making (e.g., sound judgment, logical reasoning, using resources wisely), or executing (tactical proficiency, meeting mission standards) knowledge and skills and reflect effective managerial task performance for U.S. Army officers (e.g., Conway, 1999; Tucker, Gunther, & Pleban, 2010; U.S. Army Cadet Command, 2002; U.S. Department of the Army, 2006). Further, six of these modules related directly to troop leading procedures (TLP), which describe the decision-making process at the company/team echelon and below.

In the development of the Company Command Competencies SJT, prior work also was considered that identified behaviors related to high-level adaptive decision makers. In particular, Lussier et al. (2003) identified eight adaptive decision-making behaviors that were relatively consistent over a wide range of tactical situations. For the present research, six of these behaviors are reflected in the modules (see Table 2):

- Keep a focus on mission and higher commander's intent;
- Model a thinking enemy;
- Consider effects on terrain;
- Use all assets available;
- Exhibit visualizations that are dynamic, proactive, and flexible; and
- Show rich contingency thinking.

Phillips, Shafer, Ross, Cox, and Shadrick's (2006) research on the development of behaviorally-anchored rating scales for these behaviors was very helpful to the present research in defining the specific performance levels for these adaptive thinking skills.

The focus on adaptive skill (35% of the modules) was a result of the instructional emphasis in the MC3 curriculum (program of instruction) as well as the Army's commitment to producing adaptive, mentally agile leaders (U.S. Department of the Army, 2006).

Further, the scenarios for the SJT represented the Army's concept of full spectrum operations (U.S. Department of the Army, 2008), ranging from combat operations (offense, defense) to stability operations to garrison operations. Thus, the officers were required to apply their knowledge and skills across diverse aspects of the operational environment (see Leibrecht et al., 2009, for the complete SJTs).

Table 2
Description of the Twenty Company-Level Modules

Module	Assessment Focus
Technical-Administrative Behaviors	
1. Operating Traffic Control Points	Prepare for a TTP review session with the Platoon Leaders
2. Executing Cordon and Search	Think through cordon and search planning considerations
3. Managing Combat Information	Identify information requirement types, handle vague issues
4. Managing Operational Risk (TLP)	Review anti-fratricide fundamentals, plan weapons control
5. Performing METT-TC Analysis (TLP)	Conduct mission analysis and develop a mission statement
6. Considering Effects of Terrain and Weather (TLP; TLAC)	Conduct terrain analysis, identify key and decisive terrain
7. Visualizing the Battlefield (Enemy; TLP; TLAC)	Array enemy elements and determine their task/purpose
8. Knowing and Using All Assigned Assets (TLP; TLAC)	Discern capabilities & limitations of tank/mechanized infantry platoons
9. Conducting Parallel Planning (TLP)	Integrate company troop leading steps into a Combined Arms Battalion timeline
10. Planning and Conducting Rehearsals	Select a company rehearsal technique for upcoming operation
11. Conducting Casualty Evacuation	Review CASEVAC fundamentals and methods
Leadership Behaviors	
12. Building a Relationship with the 1SG	Get ready to discuss roles and duties with your new 1SG
13. Mentoring a Struggling Subordinate	Prepare for a counseling session with a struggling subordinate
Adaptive Skill	
14. Receiving a Poorly Defined Mission	Plan village foot patrols in an ambiguous situation
15. Maintaining Focus on Mission/Higher Intent (TLAC)	Prioritize multiple missions in stability operations
16. Remaining Flexible to Meet Contingencies (TLAC)	Identify planning considerations for the Task Force reserve
17. Receiving an Under-Resourced Mission	Deal with mission creep during counterinsurgency operations
18. Handling Ad Hoc Task Organization	Leverage coalition & nongovernmental organization elements in a company operation
19. Understanding Foreign Cultures	Consider cultural factors before and during deployment
20. Engaging the Local Community	Analyze civil considerations and Information Operations themes for new Area of Operation

Method

Participants

Officers attending a MC3 class completed the Company Command Competencies SJT ($N = 138$). Most of the officers were Captains (7% were Lieutenants) with an average of 18 months in grade and 7 years in the military. Most were Infantry (67%); 15% were Armor; 13% were Maneuver Fires and Effects; 3% were Operations Support; 1% were Force Sustainment; and 1% were Marines. Most of the officers (86%) had served an average of one year in Iraq, and many were prior enlisted (35%). Only 29% had served in Afghanistan for an average of four months.

Measures

As described above, the Company Command Competencies SJT consisted of three dimensions of knowledge and problem-solving behaviors – technical-administrative, leadership, and adaptive skill. The technical-administrative behavior dimension consisted of 11 modules and 32 items (16 recall, 7 understanding, and 9 application items). For the purposes of the present research, all of the responses to the items within each module were averaged for an overall module score. Specifically, each item was coded as a 1 (correct) or 0 (incorrect) and then a mean percent correct score was created by averaging the items and multiplying them by 100.¹ For the items with “check all that apply” responses, only the responses to the correct answers were coded as either 1 (correct) or 0 (incorrect; responses to distracter items were not included in the total module score). Table 3 shows the initial mean percent correct scores for the module scores. All 11 module scores were used as indicators of a latent technical-administrative behavior variable in the confirmatory factor analyses.

The leadership behavior dimension consisted of only two modules and five items (2 recall, 1 understanding, and 2 application items). The responses within each module were averaged for an overall module mean percent correct score as described above (initial mean percent correct in Table 3). Both module scores were used as indicators of a latent leadership behavior variable in the confirmatory factor analyses.

¹ We examined differences between the final model based on raw scores (see Table 6; adaptive skill and technical-administrative behaviors as latent variables) and a final model based on scores weighted according to proposed item difficulty (i.e., recoded recall responses = 1, understanding responses = 3, application responses = 5). Although the items were weighted, they retained their original module designation (i.e., the same items were used to create each overall module score). A comparison of the results for these models suggested no practical differences between the two models; however, the model with the raw scores showed slightly better fit and higher factor loadings. Two additional models were tested in which three indicators of the latent variables for the final model (Table 6) were created based on item difficulty (i.e., recall, understanding, and application). In one model the indicators were created by averaging the weighted items within each level of difficulty; however, this model could not be estimated because the observed variables (indicators) were linearly dependent. In a second model, the indicators were based on the mean of the raw items for each level of difficulty; however, the results for the fit indices for this model suggested that the estimates were less than the degrees of freedom [$\chi^2(8) = 7.51$; RMSEA = .00; CFI = 1.00; Kline, 2005]. In summary, although the items were written to tap different levels of learning, the findings suggest that the raw scores yielded a more accurate representation of the data.

The adaptive skill dimension consisted of seven modules and 17 items (6 recall, 4 understanding, and 7 application items). The responses within each module were averaged for an overall module mean percent correct score as described above (initial mean percent correct in Table 3). All seven module scores were used as indicators of a latent adaptive skill variable in the confirmatory factor analyses.

Table 3

Mean Percent Correct Scores, Standard Deviations, and Coefficient Alpha (Original & Final) for Each Company Command Module

Dimension	Module	Original α^2 (# of Items)	Final α (# of Items)	Original Mean % Correct (SD)	Final Mean % Correct (SD)
Technical- Administrative Behaviors	Operating Traffic Control Points	.14 (5)	.40 (2)	66% (.18)	95% (.17)
	Executing Cordon & Search	-.24 (6)	.35 (2)	54% (.17)	32% (.35)
	Managing Combat Information	.10 (6)	.64 (3)	43% (.15)	77% (.31)
	Managing Operational Risk	-.14 (9)	.38 (2)	70% (.13)	88% (.25)
	Performing METT-TC Analysis	.69 (9)	.75 (7)	90% (.16)	89% (.19)
	Considering Effects of Terrain & Weather	.74 (6)	.74 (6)	87% (.21)	87% (.21)
	Visualizing the Battlefield	.70 (.14)	.73 (9)	48% (.21)	50% (.27)
	Knowing & Using All Assigned Assets	.33 (10)	.52 (4)	64% (.17)	54% (.29)
	Conducting Parallel Planning	-.12 (3)	-	51% (.20)	-
	Planning & Conducting Rehearsals	.67 (12)	.69 (9)	60% (.21)	66% (.23)
	Conducting Casualty Evacuation	.34 (3)	.40 (2)	61% (.32)	59% (.38)
Leadership Behaviors	Building a Relationship with the 1SG	.20 (7)	.48 (3)	63% (.17)	41% (.33)
	Mentoring a Struggling Subordinate	.09 (7)	-	74% (.14)	-
Adaptive Skill	Handling Ad Hoc Task Organization	.45 (10)	.56 (6)	66% (.19)	75% (.23)
	Receiving a Poorly Defined Mission	.08 (6)	.37 (3)	80% (.17)	80% (.25)
	Maintaining Focus on Mission, Higher Intent	-.01 (6)	-	67% (.19)	-
	Remaining Flexible to Meet Contingencies	.35 (5)	.56 (3)	61% (.25)	72% (.32)
	Receiving an Under-Resourced Mission	.10 (5)	.42 (3)	56% (.25)	62% (.34)
	Understanding Foreign Cultures	.40 (8)	.56 (3)	85% (.15)	83% (.27)
	Engaging the Local Community	.10 (4)	.42 (2)	64% (.23)	82% (.31)

² A negative α is obtained when the average covariance among the items is negative often resulting from much error in measurement (for a review see Nichols, 1999).

Procedure

The participants received the paper and pencil SJT in one large classroom (all 138 participants completed the SJT in one room). The participants completed the informed consent, short demographic sheet, and the SJT. All responses were anonymous.

Analyses

The data collected from both SJTs were used to refine the SJT items based on the psychometric properties of the measure. First, we conducted reliability analyses and examined the inter-item and the corrected item-total correlations. Items that were negatively correlated with other items in the module or that did not display a useful level of covariation with the total score ($r < .2$) were dropped from further analysis. Second, we computed module scores by averaging all of the items for that module (recall, understanding, application). Third, we examined the dimensionality of the company command SJT constructs using structural equation modeling.

Tests of the hypothesis for the dimensionality of the company command SJT constructs were conducted in two steps. In the first step, the dimensionality of the constructs was assessed with a CFA model using AMOS 16.0.1 (Arbuckle, 2007). CFA was chosen as the method of analysis because the goal of the present research is to assess the dimensionality of the SJTs according to an a priori theoretical model of leader skill and because CFA models measurement error and thus provides a more accurate representation of the data. There were some missing data (less than 3% for each research variable); therefore, we used the maximum likelihood estimation procedure in AMOS that estimates the means and intercepts to fit the model. It is important to note that module scores were deleted as indicators of the latent variable if their factor loadings were not significant.

In the second step, we examined a series of alternative nested models and evaluated the difference in chi-square values to test Hypothesis 1. The following goodness-of-fit indices were used to evaluate the statistical models: chi-square, comparative fit index (CFI), incremental fit index (IFI), and the root-mean-square error of approximation (RMSEA). For small samples, the fit indices are compared against commonly used criteria (i.e., $CFI \geq .90$; $IFI \geq .90$, $RMSEA \leq .10$; Browne & Cudeck, 1993; Byrne, 2001; Hu & Bentler, 1999).

Results

Table 3 shows the original means, standard deviations, number of items used in the reliability analyses and coefficient alphas for each module. Items were removed based on the results of the Kuder-Richardson reliability results (the item-level scores were dichotomous), and final scores were computed (final means, standard deviations, and coefficient alphas also are shown in Table 3). That is, Table 3 shows the alpha and means for the modules based on the raw data as well as the final alphas and means for the modules based on the remaining items that met the reliability criteria (i.e., were positively correlated with one another and had a level of covariation above $r = .20$ with the total score). It is important to note that three of the modules (Conducting Parallel Planning, Mentoring a Struggling Subordinate, Maintaining Focus on Mission, Higher Intent) were not included in subsequent analyses because all of the remaining items demonstrated corrected item-total correlations of $r < .20$.

The reliability estimates for some of the module scores are not very high but are typical for SJTs. Waugh (2004) explained that:

Even at the item level, situational judgment tests are multidimensional and heterogenous in nature. That is, a typical item measures more than one construct and the items measure the various constructs to different degrees. Internal consistency reliability estimates, on the other hand, assume that a single construct or the same set of constructs (to the same degree) underlies the items. Thus, coefficient alpha usually underestimates the reliability of situational judgment tests. (p. 6-7)

Although test-retest estimates of reliability are preferred, they could not be obtained for this validation. Moreover, as many of the modules consisted of only two and three items, it is unlikely that a high coefficient alpha would be obtained for these modules.

Although the modules were used as indicators of the three latent performance/skill dimensions, Table 4 shows the means, standard deviations, and intercorrelations among these dimensions as computed by averaging the module scores.

Table 4
Mean Percent Correct Scores, Standard Deviations, Internal Consistency Estimates, and Intercorrelations among the Research Variables for the Company Command Competencies SJT

Scale	Mean	SD	1	2	3
1. Adaptive Skill	.75	.18	(.61)		
2. Technical-Administrative Behaviors	.70	.11	.33**	(.41)	
3. Leadership Behaviors	.41	.33	-.03	.08	(.48)

Notes. Coefficient alpha internal consistencies are located on the diagonal in parentheses.

** $p < .05$.

We tested five CFA models to evaluate the dimensionality of the constructs. As the Leadership Behaviors dimension had only one indicator (one of the modules was removed based on the reliability results), we estimated the error variance based on Formula 1:

$$\sigma_e^2 = \sigma^2(1-r_{xx}) \quad (1)$$

where σ^2 is the variance of the First Sergeant module and r_{xx} is its reliability.

Table 5 shows that the three-factor model with the remaining modules included as indicators of the adaptive skill, technical-administrative behaviors and leadership behaviors was not an adequate fit to the data. Further, 10 of the factor loadings were not significant or marginally significant ($p < .10$). The majority of these indicators had very low reliability estimates suggesting a high degree of measurement error for these items (see Tables 3 and 6). After removing these indicators, the 3-factor model demonstrated adequate fit to the data. As shown in Table 6, all of the remaining factor loadings were significant at least the $p < .05$ level, ranging from .23 to .71.

To determine whether the 3-factor model was the best fit to the data, we compared these results to three alternative nested models. First, we examined whether a two-factor model that collapsed leader behaviors and technical-administrative dimensions was a better fit to the data. The results of the chi-square difference test were not significant indicating comparable fit for the two models ($\Delta\chi^2(1) = .93, ns$). As models that are more parsimonious are better representations of the data, the two-factor model is a better fitting model. However, the factor loading for the additional indicator (from the leader behavior dimension) was not significant, and the chi-square difference test for a model with this indicator removed was not significant ($\Delta\chi^2(9) = 12.26, ns$), suggesting (based on parsimony) better fit over the model with it removed. Finally, we tested a model that collapsed adaptive skill with the technical-administrative behaviors dimension. The results indicated significantly worse fit for this one-factor model than the final two factor model ($\Delta\chi^2(1) = 21.94, p < .01$). In summary, the results demonstrated that the Company Command SJT does not measure three distinct dimensions of leader skill, rather a two-factor model, omitting the leadership behaviors dimension, was the best fitting model to the data. These results suggest that the SJT uniquely measures two types of cognitive skills – technical/tactical skills and adaptive skills needed by officers to perform at this echelon.

Table 5

Results of the Confirmatory Factor Analyses to Test the Dimensionality of the Constructs for the Company Command Competencies SJT

Model	χ^2	df	RMSEA	CFI	IFI
3 factors with all indicators (modules)	155.04	117	.05	.75	.80
3 factors – removed indicators (modules) with non-significant factor loadings	52.67	42	.04	.92	.93
2 factors – Technical-administrative behaviors /Leadership behaviors collapsed	53.60	43	.04	.92	.93
*2 dimensions – Leadership behavior indicator removed	41.34	34	.04	.94	.95
1 dimension – Adaptive skill/Technical-administrative behaviors collapsed (Leadership behaviors removed)	63.28	35	.08	.77	.81

Note. * = Final model. RMSEA = Root Mean Square Error of Approximation; CFI = Comparative Fit Index; IFI = Incremental Fit Index.

Table 6

Factor Loadings (Standardized Regression Weights) for the Company Command Competencies SJT Final Two-Factor Model

Latent Variables	Indicators (Modules)	Factor Loadings (Standardized Regression Weights) for the 2-Dimensional Model
Technical-Administrative Behaviors	Managing Combat Information	.41**
	Performing METT-TC Analysis	.45**
	Visualizing the Battlefield	.43**
	Planning & Conducting Rehearsals	.72**
Adaptive Skill	Handling Ad Hoc Task Organization	.55**
	Receiving a Poorly Defined Mission	.53**
	Remaining Flexible to Meet Contingencies	.65**
	Receiving an Under-Resourced Mission	.50**
	Understanding Foreign Cultures	.23*
	Engaging the Local Community	.36**

Note. * $p < .05$; ** $p < .01$.

Battalion Staff Competencies SJT Validation

The Battalion Staff Competencies SJT consisted of 15 modules that were developed to assess the competencies associated with serving on a battalion staff, mainly in the role of Assistant S3 or Battle Captain (Table 7). The modules covered a broad spectrum of real world problems facing battalion staff officers operating in the COE; however, each module related to one of the leader behavior dimensions described previously: technical-administrative behaviors, leadership behaviors, adaptive skill behaviors (see Table 2).

As with the company command modules, the MC3's emphasis on doctrinally defined warfighting processes and solutions is represented in more than half of the modules reflecting the *technical-administrative behaviors* dimension. Further, five of the modules related directly to the military decision-making process, which is planning process for battalion-level and above.

Similar to the Company Command Competencies SJT, prior research also was considered that identified behaviors related to high-level expert tactical decision makers. For the present research, six of these behaviors are reflected in the modules (Keep a focus on mission and higher commander's intent; Use all assets available; Exhibit visualizations that are dynamic, proactive, and flexible; and Show rich contingency thinking; See the big picture; Consider timing).

The focus on adaptive skill (27% of the modules) was a result of the instructional emphasis in the MC3 curriculum (program of instruction) as well as the Army's commitment to producing adaptive, mentally agile leaders (U.S. Department of the Army, 2006).

Further, the scenarios for the SJTs represented the Army's concept of full spectrum operations (U.S. Department of the Army, 2008), ranging from combat operations (offense, defense) to stability operations to garrison operations. Thus, the officers were required to apply their knowledge and skills across diverse aspects of the operational environment (see Leibrecht et al., 2009, for the complete SJTs).

Table 7
Description of the 15 Battalion-Level Modules

Module	Assessment Focus
<i>Technical-Administrative Behaviors</i>	
1. Updating/Refining ISR Plan	Analyze CAB ISR requirements in the BCT's latest WARNO
2. Understanding All Available Assets	Identify key BSTB assets and describe their capabilities
3. Developing a Mission Statement	Analyze BCT WARNO and develop CAB mission statement
4. Developing COA Statement and Sketch	Develop COA statements and sketches for wargaming
5. Performing COA Analysis	Set up wargaming session, including COA evaluation criteria
6. Knowing Own Role, Responsibilities	Identify roles and responsibilities of CAB S-3 and Asst S-3
7. Managing Combat Information	Review Battle Captain's role in managing tactical information
8. Exploiting All Staff Functions	Plan information operations as CAB Asst S-3
9. Conducting Mission Analysis	Analyze civil considerations using ASCOPE for new AO
<i>Leadership Behaviors</i>	
10. Directing Casualty Evacuation	Review fundamentals for a CAB-level CASEVAC rehearsal
11. Managing Time and Tasks	Characterize battle rhythm and prepare a CP battle rhythm
<i>Adaptive Skill</i>	
12. Maintaining Focus on Mission, Higher Intent	Manage and prioritize information in the CAB CP
13. Seeing the Big Picture	Resolve conflicting information and recommend a COA
14. Remaining Flexible to Meet Contingencies	Provide realistic recommendations that avoid mission creep
15. Directing Detainee Operations	Consider principles of detainee questioning and interrogation

Method

Participants

The same participants for the Company Command Competencies SJT completed the Battalion Staff Competencies SJT. There were fewer individuals ($N = 103$), however, the demographic characteristics are the same as reported previously.

Measures

As described above, the Battalion Staff Competencies SJT consisted of three dimensions of knowledge and problem-solving behaviors – technical-administrative, leadership, and adaptive skill. The technical-administrative behavior dimension consisted of 15 modules and 32 items (17 recall, 9 understanding, and 5 application items). For the purposes of the present research, all of the items within a module were averaged to create overall module scores. Specifically, each item was coded as a 1 (correct) or 0 (not correct) and then a mean percent correct score was created by averaging the items and multiplying by 100. For the items with “check all that apply” responses, only the responses to the correct answers were coded as either 1 (correct) or 0 (incorrect; responses to distracter items were not included in the total module score). Table 8 shows the original mean percent correct for the module scores.

The leadership behavior dimension consisted of only two modules and nine items (4 recall, 3 understanding, and 2 application items). The responses to these items were averaged within each module for overall module scores as described above. Table 8 shows the original mean percent correct for the module scores. Both module scores were used as indicators of a latent leadership behavior variable in the confirmatory factor analyses.

The adaptive skill dimension consisted of four modules and nine items (3 recall, 2 understanding, and 4 application items). The responses to these items were averaged within each module for overall module scores as described above. Table 8 shows the original mean number of correct responses for the module scores. All four module scores were used as indicators of a latent adaptive skill variable in the confirmatory factor analyses.

Procedure

The participants received the paper and pencil SJT in their regular small classrooms (approximately nine officers per classroom). The participants completed the informed consent and the SJT. All responses were anonymous.

Analyses

The analyses conducted for the Battalion Staff Competencies SJT were the same as for the Company Command Competencies SJT except that it was necessary to form composite measures (item parcels) of the items. Preliminary analyses indicated that a 3-factor model with all of the modules and their associated items as indicators of the latent variables produced a covariance matrix that was not positive definite.³ Thus, composite measures were formed to reduce the nonnormality of the indicators and improve the fit of the model. Because of the nature of the SJT (several assessment items related to each scenario; SJT content likely relates certain responses), the exploratory factor analysis method was employed to create the composite measures (for a review see Landis, Beal, & Tesluk, 2000). For the technical-administrative behaviors dimension, five additional items were omitted from subsequent analyses because the factor analysis results indicated loadings on factors that could not be explained. Eight composite measures were used as indicators of a latent technical-administrative behavior variable in the confirmatory factor analyses. Four composite measures and two composite measures were used as indicators of the leadership and adaptive skill dimensions, respectively, in the confirmatory factor analyses.

³ The likely cause of a not positive definite covariance matrix is that the matrix contains zero or negative eigenvalues which could be caused by linear dependencies among variables or negative error variance.

Results

Table 8 shows the original means, standard deviations, number of items used in the reliability analyses and coefficient alphas for each module. Items were removed based on the results of the Kuder-Richardson reliability analysis. The final means, standard deviations, and coefficient alphas are also shown in Table 8. Although the modules were used as indicators of the three latent performance/skill dimensions, Table 9 shows the means, standard deviations, and intercorrelations among these dimensions as computed by averaging the module scores.

Table 8
Mean Percent Correct Scores, Standard Deviations, and Coefficient Alphas (Original & Final) for Each Battalion Staff Module

Dimension	Module	Original α (# of Items)	Final α (# of Items)	Original Mean % Correct (SD)	Final Mean % Correct (SD)
Technical-Administrative Behaviors	Updating/Refining ISR Plan	.61 (11)	.67 (6)	40% (.23)	42% (.31)
	Understanding All Available Assets	.71 (15)	.78 (10)	53% (.24)	58% (.30)
	Developing a Mission Statement	.64 (26)	.69 (9)	34% (.14)	47% (.25)
	Developing COA Statement and Sketch	.79 (24)	.76 (12)	60% (.21)	63% (.26)
	Performing COA Analysis	.84 (26)	.83 (12)	57% (.23)	59% (.29)
	Knowing Own Role, Responsibilities	.65 (13)	.94 (6)	65% (.23)	83% (.33)
	Managing Combat Information	.41 (5)	.60 (3)	71% (.26)	67% (.35)
	Exploiting All Staff Functions	.28 (6)	.65 (2)	51% (.24)	88% (.28)
	Conducting Mission Analysis	.75 (8)	.75 (8)	46% (.29)	46% (.29)
Leadership Behaviors	Directing Casualty Evacuation	.45 (8)	.57 (4)	49% (.24)	60% (.35)
	Managing Time and Tasks	.50 (23)	.61 (8)	50% (.20)	61% (.29)
Adaptive Skill	Maintaining Focus on Mission, Higher Intent	.48 (9)	.54 (6)	57% (.22)	57% (.26)
	Seeing the Big Picture	.63 (2)	.63 (2)	63% (.41)	63% (.41)
	Remaining Flexible to Meet Contingencies	-	-	36% (.48)	36% (.48)
	Directing Detainee Operations	.02 (3)	-	28% (.25)	-

Table 9

Mean Percent Correct Scores, Standard Deviations, Internal Consistency Estimates, and Intercorrelations among the Research Variables for the Battalion Staff Competencies SJT

Scale	Mean	SD	1	2	3
4. Adaptive Skill ⁴	.51	.27	(.21)		
5. Technical-Administrative Behaviors	.60	.20	.57**	(.79)	
6. Leadership Behaviors	.61	.27	.58**	.70**	(.59)

Notes. Coefficient alpha internal consistencies are located on the diagonal in parentheses.

** $p < .01$.

We tested five CFA models to evaluate the dimensionality of the constructs. All but one of the modules were modeled as indicators of the latent variables. The reliability analyses indicated that the remaining items for *Directing Detainee Operations* had corrected item-total correlations of $r < .20$ and thus were not included in subsequent analyses. Furthermore, the exploratory factor analyses (EFAs) results demonstrated that the Remaining Flexible to Meet Contingencies item and an item for the Seeing the Big Picture module had communalities greater than 1 and were the likely reasons for why the factor solution could not be rotated. When these items were omitted from the analyses, the EFA results suggested a 2-factor model as shown in Table 11.

The results of a CFA with the three dimensions as latent variables (technical-administrative, adaptive skill, leadership behaviors) and with composite measures as indicators also produced a covariance matrix that was not positive definite. The likely cause of this is the nonnormative nature of the adaptive skill items as only two composite measures were able to be formed. A model was tested in which the leadership behaviors composite measures were collapsed with the adaptive skill measures. Table 10 shows that this two-factor model was an adequate fit to the data. As shown in Table 11, all of the factor loadings were significant at the $p < .01$ level, ranging from .33 to .77.

To determine whether the 2-factor model was the best fit to the data, we compared these results to two alternative nested models. First, we examined whether a two-factor model that collapsed the leader behaviors and technical-administrative dimensions was a better fit to the data. However, the results for this model showed an inadmissible solution (covariance matrix was not positive definite). The likely cause of this is the nonnormative nature of the adaptive skill items as only two composite measures were able to be formed. Finally, we tested a model that collapsed all of the dimensions into one general factor. The results indicated significantly worse fit for this one-factor model than the two factor model ($\Delta\chi^2(1) = 4.03, p < .05$). In summary, the results demonstrated that a three-factor model with leadership behaviors, adaptive skill, and technical-administrative behaviors as distinct dimensions did not fit the data as well as a two-factor model with the leadership behaviors dimension and adaptive skill dimension

⁴ As the remaining items for the Directing Detainee Operations Module had corrected item-total correlations of $< .20$, it was omitted from subsequent analyses. The low reliability for the Adaptive Skill module is likely due to the dichotomous nature of the Remaining Flexible to Meet Contingencies module.

collapsed into one dimension. The two-factor model with leadership behaviors/adaptive skill and technical-administrative behaviors as distinct dimensions fit the data better than several other alternative nested models. Thus, the battalion staff competencies SJT measures two types of cognitive skills uniquely – technical/tactical skills and leadership/adaptive skills needed by officers to perform at this echelon.

Table 10

Results of the Confirmatory Factor Analyses to Test the Dimensionality of the Constructs for the Battalion Staff Competencies SJT

Model	χ^2	df	RMSEA	CFI	IFI
*2 factors – Adaptive skill / Leadership behaviors collapsed	96.29	76	.05	.94	.95
1 dimension – Adaptive skill / Leadership behaviors / Technical-administrative behaviors collapsed	100.32	77	.05	.94	.94

Note. * = Final model. RMSEA = Root Mean Square Error of Approximation; CFI = Comparative Fit Index; IFI = Incremental Fit Index.

Table 11

Factor Loadings (Standardized Regression Weights) for the Battalion Staff Competencies SJT Final Two-Factor Model

Latent Variables	Indicators (Modules)	Factor Loadings (Standardized Regression Weights) for the 2-Dimensional Model
Technical-Administrative Behaviors	Factor 1 (16 items): Technical Information for Planning M2A2c, M2A2e, M2A4h, M2A4i, M4A1d, M4A1h, M4A1f, M4A1i, M4A1j, M4A2, M4B, M5A1c, M5A1d, M5A1e, M5A1f, M5A1g	.77**
	Factor 2 (6 items): Staff Roles M6Aa, M6Ab, M6Ac, M6Ad, M6Ae, M6Af	.51**
	Factor 3 (5 items): Wargaming Steps M5A2a, M5A2b, M5A2c, M5A2d, M5A2e	.43**
	Factor 4 (6 items): Technical Information for Assets M2A1, M2A3, M2A4a, M2A4b, M2A4e, M2A4k	.54**
	Factor 5 (5 items): Mission Statement M3Ba, M3Bb, M3Bc, M3Bd, M3Be	.33**
	Factor 6 (11 items): Mission Analysis M4A3a, M4A3b, M5A3, M9Aa, M9Ab, M9Ac, M9Ad, M9Ae, M9Af, M9B, M9C	.76**
	Factor 7 (9 items): ISR Process & Concept of Operations M1Ae, M1Ag, M1Ai, M1Bf, M1Bg, M1Bk, M4C, M7B, M7Cc	.48**
	Factor 8 (4 items): Staff Planning Activities M4A3c, M7Ca, M8Ba, M8Bd	.69**
Adaptive Skill / Leadership Behaviors	Adaptive Skill Factor 1 (4 items): Analyzing Information & Responding to Changes M12A1c, M12A2, M12Ci, M13C	.71**
	Adaptive Skill Factor 2 (3 items): Executing Operations M12A1a, M12Cj, M12Ck	.52**
	Leadership Behaviors Factor 1 (4 items): Battle Rhythm Processes M11A2f, M11A3a, M11A3b, M11A3c	.63**
	Leadership Behaviors Factor 2 (4 items): Rehearsing & Executing MEDEVAC Operations M10Bb, M10Bf, M10Bg, M10C	.65**
	Leadership Behaviors Factor 3 (2 items): Delegating Responsibilities M11A1, M11B	.52**
	Leadership Behaviors Factor 4 (2 items): Battle Rhythm Factors M11A2c, M11A2e	.52**

Note. ** $p < .01$.

Discussion

The purpose of this research project was to investigate the psychometric properties of the previously developed SJTs on specific leader cognitive skills and provide some construct validity evidence for the measures. Overall, both measures demonstrated support for adaptive skill as a separate dimension from technical-administrative behaviors. For the Battalion Staff Competencies SJT, it is not surprising that the best-fitting model was one in which the items for the adaptive skill and leadership behaviors were collapsed as some of the leadership items reflected adaptive qualities. For example, the *Managing Time and Tasks* module application scenario required leaders to analyze a higher headquarters compressed timeline from multiple perspectives (i.e., different roles) to select the best course of action. These skills reflect the adaptability dimension *Deals with Uncertain and Unpredictable Work Situations* (Pulakos, Arad, Donovan, & Plamondon, 2000) and reflect Army leader behaviors such as *Changes roles, responsibilities, plans and actions in response to new or additional information regarding the situation, time constraints, or guidance from higher echelons; alters timelines; plans for contingencies* (Tucker & Gunther, 2009; Tucker et al., 2007).

Additionally, correctly answering the *Directing Casualty Evacuation* module application scenario indicates that leaders have analyzed the capabilities of the assets available to them, considered the multiple aspects of the scenario that could affect a successful MEDEVAC operation (planned for contingencies), and assessed the effects of terrain on the operations. These skills also reflect the adaptability dimension *Deals with Uncertainty* described above. Similarly, Army leaders have suggested that training for adaptive skill should include varied opportunities for leaders to plan for contingencies and discussed the need for leaders to learn the capabilities of new technology and other assets that are attached to the unit (Tucker et al., 2007).

One reason for why the leadership behaviors dimension was not supported for the Company Command Competencies SJT, may be the difficulty in writing true “leadership” (mentoring, coaching) multiple-choice items. The feedback we received from some of the participants on these items is that a paper/pencil measure is severely limited in the level of detail that can be provided in the scenarios, and that they would need to know much more about the context to accurately answer the question. Other participants disagreed with the correct responses and indicated that leaders have different relationships with each subordinate and would change their approach depending on the individual (similar to the leader-member exchange theory, e.g., Gerstner & Day, 1997). These changing contextual factors make it challenging for researchers to develop “interpersonal” SJTs items and show construct validity for these types of dimensions.

Final SJTs

As these are newly developed SJTs, many items were deleted from the original measures (Leibrecht et al., 2009) due to poor psychometric properties. Further, for the Company Command Competencies SJT entire modules were deleted because they were not significant indicators of the technical-administrative behaviors dimension, typically resulting from having poor psychometric properties. Specifically, many of the modules that were deleted had very low reliability estimates possibly due to the fact that few correct responses were developed per

module. In contrast, many more correct responses were developed for the Battalion Staff Competencies SJT and the reliability estimates were considerably higher. In the development of new tests it is not unusual to omit many of the original items due to low reliability estimates, etc. Test developers typically write many items reflecting the same psychological construct because they know that they will not be able to demonstrate acceptable reliability / validity estimates for all of the items.

It is important to note that the findings for the modules of the technical-administrative dimension (or the “Doctrine and TTP Dimension” in the Leibrecht et al., 2009, report) with low reliability estimates and nonsignificant factor loadings also reflect the feedback from SMEs (small group instructors of the MC3) indicating that some of these modules did not demonstrate face validity. That is, in their review of the Company Command Competencies SJT, the SMEs indicated that the scenarios and items for some of these modules did not reflect the tactics, techniques, and procedures (TTP) employed in the current operational environment. On the other hand, the scenarios and items for the modules related to the adaptive skill dimension reflect more ill-defined and complex problems and thus may assess a broader range of higher-order cognitive skills.

There are two main reasons why the findings of the present research are important for training developers and instructors. First, these individuals need to know for which skill sets SJTs are useful and appropriate measures. Specifically, the findings suggest that SJTs may not be appropriate measures of certain leadership skills reflecting interpersonal skills. The test developer may not be able to create scenarios or response items so that the responders feel that they have sufficient information to answer the questions. These types of skills may be best tested in a different format such as role-playing exercises, etc. Second, training developers and instructors need to know that the SJTs do not assess a single psychological construct. That is, the tests uniquely measure adaptive skill and technical-administrative behaviors (tactical and technical skills). If all of the SJT responses are combined to create an overall score, these scores may mask strengths and weaknesses in learner acquisition and retention of certain skills. By scoring the SJTs according to two different dimensions, the instructors can provide detailed and more useful feedback to the Army leaders.

Appendix A contains the final Company Command Competencies SJT which consists of the modules presented in Table 6 reflecting the technical-administrative behaviors and adaptive skill dimensions. The technical-administrative behavior dimension has 4 modules and 8 items (4 recall, these items are designated with the letter “A,” 3 understanding, “B”, and 1 application item, “C”). The adaptive skill dimension has 6 modules and 13 items (5 recall, 4 understanding, and 4 application).

Appendix B contains the final Battalion Staff Competencies SJT which consists of the factors and items presented in Table 11 reflecting the technical-administrative behaviors and leadership behaviors / adaptive skill dimensions. The technical-administrative behavior dimension has 8 modules and 22 items (13 recall, these items are designated with the letter “A,” 6 understanding, “B”, and 3 application item, “C”). The leadership behaviors / adaptive skill dimension has 4 modules and 10 items (5 recall, 2 understanding, and 3 application).

The answer key for each module contains three elements of information: a list of the correct answer(s) for each question, a doctrinal reference for each correct answer, and a rationale (explanation) for each correct answer. The rationale statement typically extracts pertinent information from the reference and also may reiterate information from the scenario or tactical materials. Appendix C contains a complete list of doctrinal references cited in the answer keys.

SJT Development and Validation Lessons Learned

Overall, the findings indicate that a SJT may be a practical and valid method for assessing leader adaptive and decision-making skills. Student feedback was highly favorable due to the scenario-based nature of the questions. However, the overall length of the metrics may have affected the results; student motivation may have been affected by responding to the numerous items contained in the original SJTs. It took approximately one to two hours for the officers to complete the SJTs. The final SJTs provided in this report are considerably shorter.

Further, the testing condition may have affected the results. The Company Command Competencies SJT was administered in one large classroom in a testing atmosphere (i.e., quiet with no distractions). For the Battalion Staff Competencies SJT, the participants completed the measure in their small-group classrooms, and the atmosphere varied across the classes. That is, some instructors administered the SJT similar to the Company Command Competencies SJT in a quiet room with no distractions. However, other instructors allowed some distractions to occur in the classrooms (talking, TV, etc.). It is difficult to know the true effects on the results, but future research should strive for consistency in administrations.

Development and refinement of SJTs are resource-intensive in terms of time, SME time, and cost if SMEs have to be hired externally. Because the SJTs are scenario-based, frequent updating are needed for the military context. Tactics, techniques, and procedures are constantly refined based on lessons learned from the operational context. Thus, for training materials to be relevant, they must be updated. This requires considerable SME involvement either from course instructors or contractors. Both pose challenges either with respect to the time required by instructors or the costs to hire contractors.

Future Research and Practical Implications

Additional research is needed to examine the generalizability of the model to other samples. As the SJTs were developed to assess the particular knowledge and skills of the MC3, the SJTs could be administered new MC3 students or course graduates to provide the necessary data to retest these models. Ideally, the predictive validity of the models should be tested with performance data, possibly with officer ratings as they progress through their careers.

Further, as the purpose of the present research was to determine whether the content of the SJTs reflected the three-dimensional leader skill model reported in prior research, we did not focus as much on the levels of learning as described by Bloom's *Taxonomy of Cognitive Objectives* (e.g., Bloom, Englehart, Furst, Hill, & Krathwohl, 1956). Future research may want to develop models in which these levels can be tested more accurately and rigorously. Researchers may want to construct SJTs such that equal numbers of items are reflected in each

level and develop models such that the latent variables reflect the three levels. This may provide a better understanding as to which levels contribute the most variance to the SJTs.

Product Use

A compelling use of the SJT scenarios is for hip-pocket training. That is, the scenarios could be used to facilitate discussions throughout the MC3 rather than purely as an assessment technique. Instructor feedback indicated that students came up with many more “what if” scenarios based on the original scenario. It is important to note, however, that as instructors make changes to the course curriculum, they also should update the scenarios so that they remain current and relevant.

References

- Arbuckle, J. L. (2007). *AMOS 16.0.1*. Spring House, PA: AMOS Development Corporation.
- Bloom, B. S., Englehart, M. D., Furst, E. J., Hill, W. H., & Krathwohl D. R. (Eds.). (1956). *Taxonomy of educational objectives: The classification of education goals. Handbook I: Cognitive domain*. NY: David McKay.
- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In Bollen, K. A., & Long, J. S. (Eds.). *Testing structural equation models* (pp. 136-162). Newbury Park, California: Sage.
- Burnfield, J. L., Waugh, G. W., Sinclair, A., Van Iddekinge, C., & Moriarty, K. O. (2007). Situational judgment tests. In K. O. Moriarty & D. J. Knapp (Eds.), *Army enlisted personnel competency assessment program: Phase III pilot tests* (ARI Technical Report 1198, pp. 32-38). Arlington, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (DTIC No. ADA 465808)
- Byrne, B. M. (2001). *Structural equation modeling with AMOS: Basic concepts, applications, and programming*. Mahwah, NJ: Erlbaum.
- Conway, J. M. (1999). Distinguishing contextual performance from task performance for managerial jobs. *Journal of Applied Psychology*, 84, 3-13.
- Gerstner, C. R., & Day, D. V. (1997). Meta-analytic review of leader-member exchange theory: Correlates and construct issues. *Journal of Applied Psychology*, 71, 56-60.
- Gessner, T. L., & Klimoski, R. J. (2006). Making sense of situations. In J. A. Weekley & R. E. Ployhart (Eds.), *Situational judgment tests* (pp. 13-38). Mahwah, NJ: Erlbaum.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6, 1-55.
- Kline, R. B. (2005). *Principles and practice of structural equation modeling*. New York: The Guilford Press.
- Landis, R. S., Beal, D. J., & Tesluk, P. E. (2000). A comparison of approaches to forming composite measures in structural equation models. *Organizational Research Methods*, 3, 186-207.
- Leibrecht, C. B., Tucker, J. S., Haverty, R. B., Blankenbeckler, P. N., Green, D. C. (2009). *Metrics for assessing cognitive skills in the Maneuver Captains Career Course*. (ARI Research Product No. 2009-04). Arlington, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (DTIC No. ADA 495761)

- Lussier, J. W., Shadrick, S. B., & Prevou, M. (2003). *Think like a commander prototype: Instructor's guide to adaptive thinking*. (ARI Research Product 2003-02). Arlington, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (DTIC No. ADA 413046)
- McDaniel, M. A., Morgerson, F. P., Finnegan, E. B., Campion, M. A., & Braverman, E. P. (2001). Use of situational judgment tests to predict job performance: A clarification of the literature. *Journal of Applied Psychology*, 80, 730-740.
- Motowidlo, S. J., Dunnette, M. D., & Carter, G. W. (1990). An alternative selection procedure: The low-fidelity simulation. *Journal of Applied Psychology*, 75, 640-647.
- Motowidlo, S. J., Hooper, A. C., & Jackson, H. L. (2006). A theoretical basis for situational judgment tests. In J. A. Weekley & R. E. Ployhart (Eds.), *Situational judgment tests* (pp. 57-81). Mahwah, NJ: Erlbaum.
- Motowidlo, S. J., & Van Scotter, J. R. (1994). Evidence that task performance should be distinguished from contextual performance. *Journal of Applied Psychology*, 79, 475-480.
- Mueller-Hanson, R. A., Wisecarver, M. M., Dorsey, D. W., & Ferro, G. A. (2009). *Developing adaptive training in the classroom*. (ARI Research Product No. 2009-10). Arlington, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (DTIC No. ADA 507620)
- Nichols, D. P. (1999). *My coefficient alpha is negative*. Retrieved from <http://www.ats.ucla.edu/stat/spss/library/negalpha.htm>
- Phillips, J. K., Shafer, J., Ross, K. G., Cox, D. A., & Shadrick, S. B. (2006). *Behaviorally anchored rating scales for the assessment of tactical thinking mental models* (ARI Research Report 1854). Arlington, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (DTIC No. ADA 452068)
- Ployhart, R. E., & Bliese, P. D. (2006). Individual adaptability (I-ADAPT) theory: Conceptualizing the antecedents, consequences, and measurement of individual differences in adaptability. In E. Salas (Series Ed.) & C. S. Burke, L. G. Pierce, & E. Salas (Vol. Eds.), *Advances in human performance and cognitive engineering research: Vol. 6. Understanding adaptability: A prerequisite for effective performance within complex environments* (pp. 3-39). Boston: Elsevier.
- Pulakos, E. D., Arad, S., Donovan, M. A., & Plamondon, K. E. (2000). Adaptability in the workplace: Development of a taxonomy of adaptive performance. *Journal of Applied Psychology*, 85, 612-624.
- Tucker, J. S., & Gunther, K. M. (2009). The application of a model of adaptive performance to Army leader behaviors. *Military Psychology*, 21, 1-19.

- Tucker, J. S., Gunther, K. M., & Pleban, R. J. (2010). The mediating effects of adaptability on values-performance relationships. *Human Performance*, 23, 81-99.
- Tucker, J. S., Gunther, K. M., Pleban, R. J., Goodwin, G. A., & Vaughan, A. (2007). *The application of a model of adaptive performance to Army leader behaviors* (ARI Research Report No. 1870). Arlington, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (DTIC No. ADA 469726)
- US Army Cadet Command. (2002). *Leadership development program (LDP) handbook*. Ft. Monroe, VA: Author.
- US Department of the Army. (2006). *Army leadership* (Field Manual 6-22). Washington, DC: Author.
- US Department of the Army. (2008). *Operations* (FM 3-0). Washington, DC: Headquarters, Department of the Army.
- US Department of the Army. (2009, June). *A leader development strategy for an expeditionary Army* (Draft TRADOC report). Ft. Monroe, Author.
- Vandergriff, D. E. (2006). *Raising the bar: Creating and nurturing adaptability to deal with the changing face of war*. (Report for the Straus Military Reform Project; ISBN-10: 1-932019-29-4; ISBN-13: 978-1-932019-29-2). Washington, DC: Center for Defense Information.
- Waugh, G. W. (2004). Situational judgment test. In D. J. Knapp, R. A. McCloy, & T. S. Heffner (Eds.), *Validation of measures designed to maximize 21st-century Army NCO performance* (pp. 6-1 – 6-25; ARI Technical Report 1145). Arlington, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (DTIC No. ADA 423602)
- Weekley, J. A., Ployhart, R. E., & Holtz, B. C. (2006). On the development of situational judgment tests: Issues in item development, scaling, and scoring. In J. A. Weekley & R. E. Ployhart (Eds.), *Situational judgment tests: Theory, measurement, and application* (pp. 157-181). Mahwah, NJ: Erlbaum.

APPENDIX A

COMPANY COMMAND COMPETENCIES SITUATIONAL JUDGMENT TEST

LIST OF MODULES

Area	Module	PG#
<i>Technical-Administrative Behaviors</i>	<u>Managing Combat Information</u>	A-3
	<u>Performing METT-TC Analysis</u>	A-5
	<u>Visualizing the Battlefield (Enemy)</u>	A-23
	<u>Planning and Conducting Rehearsals</u>	A-28
<i>Adaptive Skill</i>	<u>Handling Ad Hoc Task Organization</u>	A-30
	<u>Receiving a Poorly Defined Mission</u>	A-33
	<u>Remaining Flexible To Meet Contingencies</u>	A-35
	<u>Receiving an Under-Resourced Mission</u>	A-37
	<u>Understanding Foreign Cultures</u>	A-40
	<u>Engaging the Local Community</u>	A-42

Assessment Category: Technical-Administrative Behaviors

Module #01: Managing Combat Information

Scenario: You are the Commander of an Infantry Company/Team. Your unit is in battle positions defending decisive terrain. You have an engineer platoon attached and are working with the platoon leader to develop an obstacle plan. One of your platoons has received digging assets and is hardening its position while the other two platoons are marking vehicle positions. You also have an attached RAVEN UAS and can see the RAVEN video feed. Your commander's critical information requirement (CCIR) is 3-5 vehicles of the Brigade Tactical Group (BTG) fixing force within 1km of the engagement area.

Questions:

A: (Recall) Listed below are the different types of required information along with their definitions. (Match the number of the correct definition with the type of required information below.)

- a. CCIR _____
- b. PIR _____

1. Elements of information required by the commander that directly affect decision-making and dictate the successful execution of military operations.
2. Information a commander needs to know about the enemy to make a decision.

B: (Understanding) You have positioned weapon systems and are now working with the engineer platoon leader on emplacing obstacles within the engagement area. Listed below are different types of combat information. Which type of information does the location of the obstacles represent? (Circle the BEST answer.)

- a. CCIR
- b. PIR
- c. FFIR
- d. EEFI

ANSWER KEY

Module #01: Managing Combat Information

Question	Answer	Doctrinal Reference/Rationale
A	a-1	Definition taken from FM 3-90.1, para 3-212
	b-2	Definition taken from FM 3-90.1, para 3-212
B	d	FM 3-90.1, para 3-212

Assessment Category: Technical-Administrative Behaviors

Module #02: Performing METT-TC Analysis

Scenario: You are the commander of TM-D/4-99 AR. The BCT has deployed as part of a multinational force in support of JTF Madera that has been conducting offensive operations to eject Coronian forces from Madera and restore the International Border. You have just received [WARNO #2](#) and have begun Troop Leading Procedures.

Questions:

A: (Recall) Match the following terms with their definitions. (Place the definition number in the blank beside each term.)

- a. Specified Task _____
- b. Implied Task _____
- c. Essential Task _____

1. Tasks that must be performed to accomplish a specified task but are not stated in the higher headquarters order.

2. Tasks that must be executed to accomplish the mission and are always included in the mission statement.

3. Tasks that are specifically assigned to a unit by its higher headquarters.

B: (Understanding) You are still the commander of TM-D/4-99 Armor. Analyze your tasks in WARNO #2 and identify specified, implied, and essential tasks as well as any constraints. (Place the definition number in the blank beside each term.)

- a. Specified _____
- b. Implied _____
- c. Essential _____
- d. Constraint _____

1. The CAB quartering party is limited to twenty vehicles.

2. Coordinate time and location to link up with TM-B.

3. Breach and proof one or more lanes on OBJ GRANT.

4. Follow CO/TMs A and C in the TF Vee formation.

ANSWER KEY

Module #02: Performing METT-TC Analysis

Question	Answer	Doctrinal Reference/Rationale
A	a-3	FM 5-0, para 3-66 states that Specified tasks are tasks specifically assigned to a unit by its higher headquarters.
	b-1	FM 5-0, para 3-67 states that Implied tasks are tasks that must be performed to accomplish a specified task or the mission, but are not stated in the higher headquarters order.
	c-2	FM 5-0, para 3-68 states that essential tasks are tasks that must be executed to accomplish the mission and are always included in mission statements.
B	a-4	FM 5-0, para 3-66 states that Specified tasks are tasks specifically assigned to a unit by its higher headquarters.
	b-2	FM 5-0, para 3-67 states that Implied tasks are tasks that must be performed to accomplish a specified task or the mission, but are not stated in the higher headquarters order.
	c-3	FM 5-0, para 3-68 states that essential tasks are tasks that must be executed to accomplish the mission and are always included in mission statements.
	d-1	FM 5-0, para 3-70 states that constraints are restrictions placed on the command by a higher command.

Copy 1 of XX Copies
4-99 AR, 1st Brigade Combat Team,
27th Armored Division
TAA UTAH (NU4488)
161415UDEC20XX
Message Number 20XX-12-16-1

WARNO #2 TO OPORD 08-12

References: Maps, 1:50,000, Series V795S, Fort Irwin MIM South and Fort Irwin MIM North

Time Zone Used Throughout the OPORD: Uniform

Task Organization.

Team A

2/A/4-99 AR (M2A3)
3/A/4-99 AR (M2A3)
1/C/4-99 AR (M1A2 SEP)

TF Control

Scout Platoon
Mortar Platoon
1/A/2-244 CHEM (SMK) (DS)
B/1st BSB (OPCON)
Maintenance Platoon

Team B

2/B/4-99 AR (M2A3)
3/B/4-99 AR (M2A3)
1/DC/4-99 AR (M1A2 SEP)

Team C

1/A/4-99 AR (M2A3)
2/C/4-99 AR (M1A2 SEP)
3/C/4-99 AR (M1A2 SEP)

Team D

1/B/4-99 AR (M2A3)
2/D/4-99 AR (M1A2 SEP)
3/D/4-99 AR (M1A2 SEP)
1/A/169 EN (OPCON)

1. SITUATION.

a. Enemy forces.

(1) Overview: On 1 August XXXX, Coronian forces attacked across the International border of Sonoma into Madera to gain access to the Gulf of Bernardino in order to establish seaports to liberate its state-run petroleum company from the high tariffs of transporting their products through neighboring countries. The Coronian National Command Authority commissioned the 3rd Operational Strategic Command (OSC) to accomplish this mission. The 3rd OSC initially attacked with the 13th and 14th Division Tactical Groups (DTGs) abreast and the 11th DTG following. The 12th DTG was held in reserve. Maderan host nation units were able to halt the Coronian attack short of the OSC's final objective, the port of San Bernardino, by defeating the lead echelon divisions. The 3rd OSC was forced to transition into a defensive posture in order to await reinforcements. The 12th

DTG's commitment had been initially delayed up to 3-4 days due to Joint Task Force (JTF) Maderan deep operations.

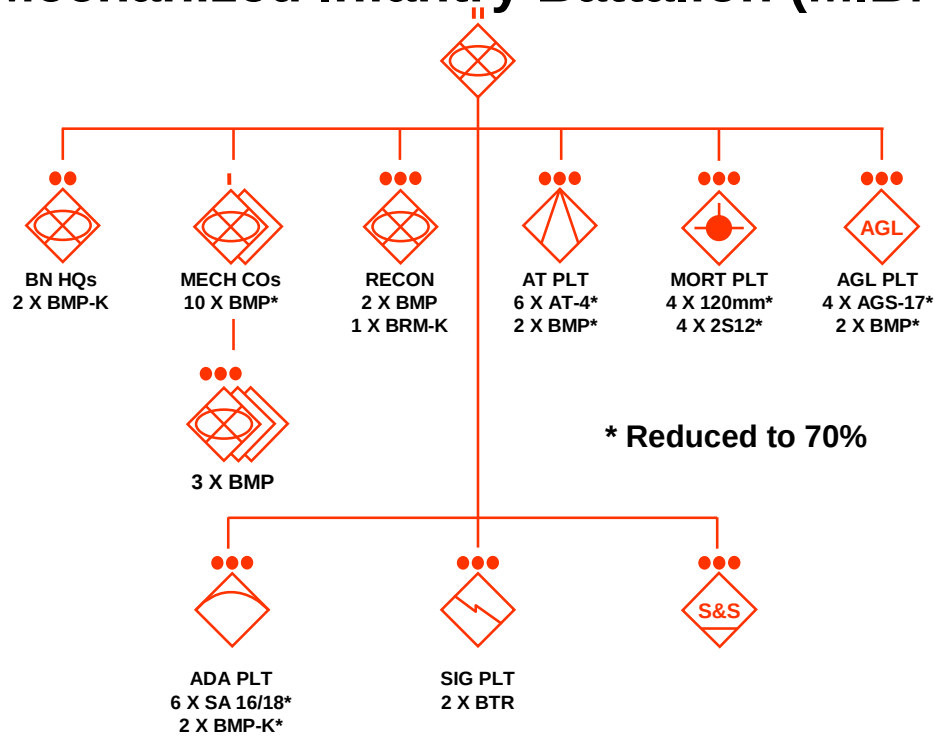
JTF Madera's subsequent attacks in late August achieved limited success, as they were able to destroy the defending 11th DTG, but were unable to cause the withdrawal of the 12th DTG, the uncommitted OSC reserve. As a result of the failed momentum of host nation and JTF forces and the limited effectiveness of recent deep operations, remnants of the 12th DTG have been able to transition to an integrated area defense, forming a natural salient and still posing a viable threat to Maderan coastal interests. Remnants from the defeated 13th and 14th DTG's have subsequently combined forces, rearmed, refueled, and with recent Coronian reinforcements, will be prepared to resume offensive operations within the next 96 hours to seize the port city of San Bernardino. Coronian forces have not resorted to nuclear weapons but have used both persistent and non-persistent agents in past operations. Enemy morale is relatively high due to the perceived success against Maderan and US forces in the recent defensive operations.

Following recent consolidation and reorganization activities, JTF Madera is prepared once again to regain the initiative and complete the destruction of Coronian forces to reestablish the international boundary. In the 23rd AD's zone, the 12th DTG defends forward with two mechanized Brigade Tactical Groups (BTGs) abreast and one back in a second echelon.

In the 1st BCT zone, the remnants of the 100th BTG have spent the past 48 hours establishing defensive positions. The 100th BTG has reorganized into two mechanized infantry battalions (MIBN) defending in depth in the BTG battle zone and has deployed a reinforced company-sized independent mission detachment (IMD) forward vicinity NV4911 in the BTG disruption zone. The 100th BTG's battle zone ranges from NV4510 (SE) to NV4618 (NE) to NV3920 (NW) to NV3214 (SW). The first echelon battalion is expected to defend the key terrain vicinity NV4111. The second echelon battalion is expected to defend the pass complex vicinity NV3515 in the 2d BCT's zone.

(2) Composition. The 100th BTG is a standard IFV-heavy unit. In our BCT's zone, the 2nd MIBN of the 100th BTG defends in the north at 70% strength and is composed of two mechanized infantry companies (MIC) (IFV (BMP-2)) and supporting arms. The OSC Independent Fires Command (IFC) has task organized an artillery group that consists of one 2S1 battalion (50% strength) and one 2S19 battalion (40% strength) to support the BTG. The BTG Reserve (BTGR) is composed of a tank company (T-80U) and the BTG's organic AT battery (9P148) (70% strength). The 2nd MIBN of the 100th BTG at 70% strength is organized as follows:

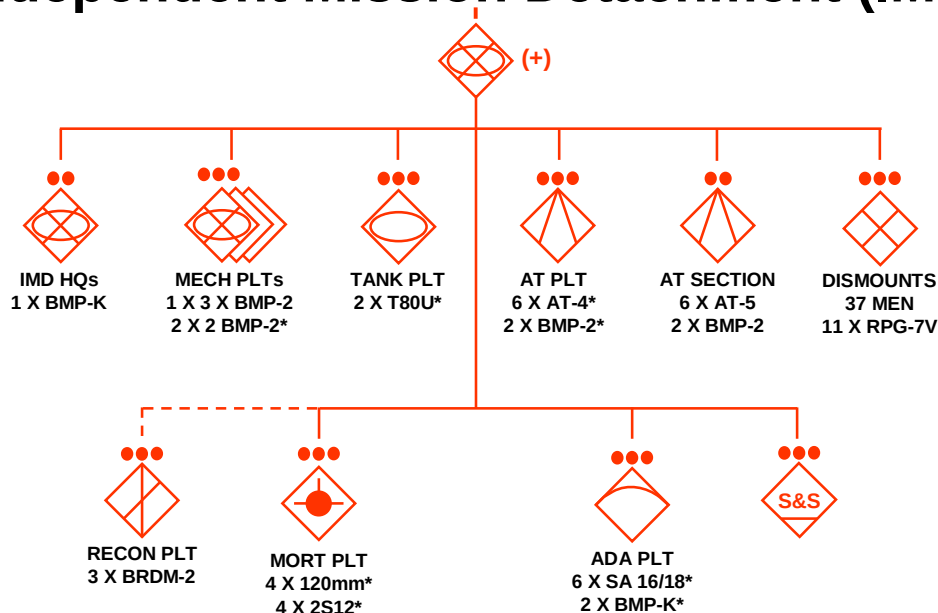
Mechanized Infantry Battalion (MIBN)



MIBN Equipment Summary at 70%						
T80U	BMP	BRM	BTR	AT-4	MORT	ARTY
0	30	1	2	6	4	0

In the CAB's area of operations, the disruption zone IMD is a MIC reinforced with a tank platoon, an AT-4 antitank platoon (AT), an AT-5 AT Section from the BTG, reconnaissance platoon (BRDM), mortar, and ADA platoons. We anticipate that the dismounted infantrymen from the mechanized platoons (MIP) will be consolidated into a dismounted platoon. The chart below shows the IMD at approximately 75% strength.

Independent Mission Detachment (IMD)



* Reduced to ~75%

IMD Equipment Summary AT 75%						
T80U	BMP	BDRM	AT-5	AT-4	MORT	ARTY
2	14	3	6	6	4	0

(3) Disposition. Within the CAB area of operation, one IMD of reinforced company size occupies a forward defensive position within the BTG disruption zone vicinity NV4911.

(4) Most Probable Course of Action:

(a) Pattern of the Defense: The disruption zone defending IMD conducts a reverse slope defense to protect oriented South and East to allow defensive preparations of the BTG battle zone MIBNs. The IMD positions the attached BTG AT Section forward of the IMD's defense in AT ambush positions to disrupt our maneuver. The IMD defends with a light infantry platoon strongpoint reinforced with AT-4s from the attached AT platoon on the restricted high ground vicinity NV4909 to protect the southern flank of the IMD and to provide overwatch of the fixing obstacles north PL LEAD. Two MIPs defend forward to protect the flanks of a third MIP, the main effort, who defends in the center. The IMD maintains its attached tank platoon as a reserve (IMDR) vicinity NV4614.

(b) Observation: The IMD reconnaissance platoon establishes 2-3 dismounted observation posts in sector as far South as the 02-grid line to provide early warning for defending forces. These observation teams coordinate directly with the BTG IFC to provide interdiction and disruption fires.

(c) Indirect Fires: The BTG IFC (2S1 BN (-) and 2S19 BN (-)) can range attacking forces with RAP HE and DPICM as far south as the 95 northing. In coordination with disruption zone observation posts, the IFC will most likely attempt to interdict stationary enemy high value assets, massed vehicles, or detected logistical trains. The BTG is not likely to employ artillery delivered situation obstacles or persistent agents in support of the disruption zone units. A mortar battery of 4 - 120mm, self propelled systems positions 1000-1500 meters behind the main effort platoon to suppress our overwatching elements, neutralize dismounted attacks, and provide protective and obscuration fires for the IMD's displacement

(d) Direct Fires: The AT ambush positions south of PL LEAD will observe the CAB's maneuver to OBJ GRANT, engage high value targets (C2 nodes, breaching assets) as our lead companies attack to seize a support by fire positions overwatching OBJ GRANT. If they are not destroyed, these ambush vehicles will maintain visual contact with the CAB to call indirect fires to disrupt our maneuver to seize OBJ GRANT. AT-4s from the infantry strongpoint will engage support and breach elements as they close within 2000 meters of their fighting positions in order to disrupt our maneuver and attrit us as we attack to seize OBJ GRANT. As we close within 300-500 meters of defending infantry strongpoints, RPG fires will attempt to deny our use of the overwatching high ground and RPK fires will defeat dismounted infantry assaults. BMPs from the reverse slope positions will engage us with long-range AT-5 fires as we cross PL LEAD. As we move north of PL LEAD, 2-3 MIPs will mass fires at fixing obstacles to defeat our breach and support elements. As obstacles are penetrated, the IMD will deploy its reserve to halt our penetration of their defense.

(e) Obstacles: The IMD employs a surface laid track and full width AT and wire fixing obstacle 2-300 meters deep by 200-1000 meters long to enable defending forces to mass direct fires on the CAB. MIPs employ 100-200 meter-long wire & mine protective obstacles 2-300 meters forward of fighting positions in support of dismounted infantry to disrupt our assault on OBJ CHARLESTON.

(f) Chemical: The 100th BTG has employed persistent chemicals vicinity NV3601 to deny our use of the valley. They are unlikely to employ persistent chemicals in support of disruption zone units but may utilize 1-2 short duration, non-persistent agents to disrupt and degrade breaching operations and overwatching forces. The IMD may choose to employ an additional strike to facilitate displacement.

(g) Air: The BTG employs 2-3 sorties of rotary-wing aircraft (HIND-E) in concert with the commitment of the IMDR to delay our penetration of their defense and to allow the IMD to displace to subsequent fighting positions.

(h) Reserve: The IMD commits its reserve (2 x T80U and 6 x AT-11 with 5km range) to an attack by fire position to defeat assaulting forces upon penetration or bypass of the fixing obstacle in the MIC's kill zone. The IMD commits its reserve to counterattack in conjunction with two HIND-E sorties if the IMD falls below 50% strength in order to allow the IMD to withdraw to subsequent positions. The IMD reserve can be in position within 6 to 12 minutes from the time that it is committed.

b. Friendly forces.

(1) 1st Brigade

(a) Mission. 1st Brigade attacks in zone at 210545 DEC XX to seize OBJs GRANT (NV4911) and LEE (NV4111) in order to allow 2nd Brigade (division ME, DO) to secure OBJ HAWK (NV3515).

(b) Intent. The purpose of our attack is to set the conditions for the forward passage of the 2nd BCT. Key tasks for this operation are the penetration of the disruption zone, destruction of the 100th BTG IFC and reserve, securing of the key terrain at OBJ LEE and the forward passage of the 2nd BCT. The end state of our attack is OBJs GRANT and LEE secured, enemy forces defeated in zone, and the 2nd BCT passed through the BCT

(c) Concept of the Operation. 1st BCT attacks (division supporting effort, shaping operation) (SE, SO) with CABs in column to penetrate the BTG battle zone and to destroy the BTG Reserve. TF 4-99 AR (SE, SO) attacks in zone to seize OBJ GRANT to allow TF 1-15 IN (main effort, decisive operation) (ME, DO) to seize OBJ LEE. On order, TF 1-15 IN attacks in zone to seize OBJ LEE in order to allow 2nd Brigade (division ME, DO) to secure OBJ HAWK. The 2-78 CAV conducts a zone reconnaissance to identify to identify enemy disposition and obstacles on OBJs LEE and GRANT. BCT deep operations destroy the BTG Reserve with CAS and indirect fires in order to protect the BCT's main attack.

(3) Adjacent Unit Missions.

(a) North. 7-22 CAV (Brigade SE 2, SO) conducts zone reconnaissance to identify enemy positions to allow the BCT attack.

(b) East. 4th BCT (Division SE 2, SO) attacks 210200 DEC XX, to protect the Division's east flank to enable the 1st and 2d BCT's attack.

(c) West. 1-15 IN attacks to seize OBJ LEE (NV4111) to enable the 2d BCT to seize OBJ HAWK (NV 3515).

c. Environment.

(1) Terrain. Terrain favors the defender. The terrain provides excellent observation and fields of fire throughout the zone allowing defending forces to mass fires at nearly all locations. The lack of cover and concealment at most points enhances this capability. East to west movement is considered restricted terrain because of the numerous wadis in zone. Movement south to north is considered easier.

(a) Observation and Fields of Fire. Observation and fields of fire for the majority of the zone are excellent and are generally limited only by the observer's relationship to the numerous intervisibility lines throughout the brigade zone.

(b) Avenues of Approach. In the southern portion of the AO from TAA UTAH to ATK PSN SHERMAN, the terrain offers a battalion-sized mobility corridor. Movement from ATK PSN SHERMAN to PL SILVER (LD/LC) is restricted by three defiles along the 98 northing: a platoon-plus corridor at NU4598 in the west, a company-sized corridor at NU4698 in the center, and a platoon-sized corridor at NU 4798. Once the TF crosses the LD/LC, the terrain opens up to a battalion-sized mobility corridor. To the west, a mountain pass running from NV460064 to NV435077 offers a platoon-sized mobility corridor. At PL LEAD, the combination of the ridge running west to east between the 09 and 10 northings force our maneuver in a west to east direction crossing numerous wadis and washes that run generally north to south. The defile

between hills 824 (NV490096) and 781 (NV507094) is a company-sized mobility corridor. The terrain further east in our zone offers two company-sized mobility corridors.

(c) Key Terrain. The ridge and rock outcropping vicinity NV480060 is key terrain because it allows observation and indirect and direct fires on the CAB as we cross the LD/LC. The ridgeline running from NV521071 to NV 520079 is key terrain because it allows observation and indirect and direct fires throughout our AO as well as disrupting our maneuver to the east. Hills 824 (NV490096), Hill 781 (NV507094) and the hill at NV 511100 are key terrain because they provide excellent overwatching positions on OBJ GRANT.

(d) Obstacles. In the southern portion of our AO the ridge running from NU460984 to NU420984 to the west and the hill mass at NU4898 to NU5096 to the east. The Tiefort Mountains (NV4604 to NV4603) form the CAB's western boundary and the ridgeline at NV470095 to NV493095 forces our maneuver from west to east along PL LEAD.

(e) Cover and Concealment. Cover and concealment are generally poor throughout the zone. Throughout the sector, stationary forces will observe moving forces for distances beyond the range of direct fire weapons systems.

(2) Weather. Weather favors the both the attacker and defender. Mild ambient temperatures cause chemical agents and smoke to remain effective for extended periods in both day and night. Prevailing winds do not favor our use of vehicle delivered smoke. Clear skies allow both friendly and enemy forces the ability to observe and designate targets throughout the zone. Mild temperatures increase the effectiveness of thermal target acquisition in both day and night conditions.

(a) Visibility. Illumination data for the next 7 days is good. Between 16 and 22 December moonrise will assist maneuver units in positioning themselves for the subsequent attacks, but will hinder reconnaissance units trying to infiltrate into the enemy's disruption zone and battle zone.

Date	BMNT	Sunrise	Sunset	EENT	Moonrise	Moonset	ILUM
16 DEC	0548	0648	1636	1736	1127	2335	49%
17 DEC	0549	0649	1636	1736	1154		60%
18 DEC	0549	0650	1637	1737	1222	0041	71%
19 DEC	0550	0650	1637	1737	1254	0150	81%
20 DEC	0551	0651	1637	1738	1331	0303	89%
21 DEC	0551	0651	1638	1738	1416	0419	96%
22 DEC	0552	0652	1638	1739	1512	1536	99%

(b) Winds. Prevailing winds favor the defender and are from the northeast to southwest from 6 to 31 miles per hour. Gusts of up to 40 miles per hour occur frequently.

(c) Precipitation. No precipitation forecasted for the next several days.

(d) Humidity and Temperature. Humidity is negligible and temperatures range from an average high of 64 degrees to an average low of 37 degrees at night. These temperatures will favor the use of active night vision devices as target acquisition systems will be able to identify the contrasts much easier.

(e) Cloud Cover. Clear skies prevail for the next several days. These conditions coupled with the amount of illumination favor the use of UASs, and CAS and passive night vision devices.

(3) Civil Considerations. To be published (TBP).

d. Attachments and detachments. None.

2. MISSION. 4-99 AR attacks 210545DEC XX to seize OBJ GRANT (NV4911) in order to allow 1-15 IN (BCT ME, DO) to seize OBJ LEE (NV4111).

3. EXECUTION.

Intent.

Purpose: To defeat the IMD and IMDR, breach any obstacles vicinity OBJ GRANT to enable TF 1-15 IN (BCT ME, DO) to seize OBJ LEE.

Key Tasks:

1. Early identification of AT ambush positions to preserve combat power and maintain momentum of the attack.
2. Thorough reconnaissance on OBJ GRANT to confirm obstacle locations and mechanized infantry platoon (MIP) positions.
3. Destruction of the infantry strongpoint overlooking Hill 781 (NV 507094) and the hill to the east at NV 511100 to allow the support force to key terrain overlooking OBJ GRANT.
4. Suppression of MIPs overlooking the obstacle complex north of PL LEAD to allow the breach force to conduct breaching operations at the point of penetration (PoP).
5. Rapid breaching and proofing of one or more lanes to allow the assault force to attack to destroy the IMD MIPs on OBJ GRANT.
6. Fixing and then destroying the IMD reserve to complete destruction of the IMD.
7. Further reduction of the obstacle complex and improvement of obstacle lanes or bypasses on OBJ GRANT by breaching, proofing, and marking two or more lanes to enable forward passage of lines of TF 1-15 IN and 2nd BCT.

End State: IMD on OBJ GRANT destroyed, obstacles cleared and marked on OBJ GRANT, TF postured to pass 1-15 IN and 2nd BCT.

a. Concept of Operations. TBP – See CAB operations sketch

- (1) Maneuver. TBP
- (2) Fires. TBP
- (3) Intelligence, Surveillance, and Reconnaissance. TBP
- (4) Intelligence. TBP
- (5) Engineer. TBP

- (6) Air and Missile Defense. TBP
- (7) Information Operations. TBP
- (8) Nuclear, Biological, Chemical. TBP
- (9) Military Police. TBP
- (10) Civil-Military Operations. TBP

b. Tasks to maneuver units. (Initial pending COA approval)

- (1) TM-A (Support Force 1):
 - (a) Maneuver as the northwest CO/TM in the TF VEE.
 - (b) Destroy AT ambushes in zone.
 - (c) Attack to destroy (ME1, SO) infantry platoon strongpoint vicinity Hill 824 (NV490096).
 - (d) Occupy a support by fire position (SBF) vicinity Hill 781 (NV 507094) oriented on OBJ GRANT.
 - (e) Link-up with TF 1-15 IN vicinity PL GOLD to coordinate forward passage of lines (FPOL).
- (2) TM-B (Assault Force):
 - (a) Maneuver as the trail CO/TM in the TF VEE.
 - (b) Attack to destroy (ME3, DO) the MIPs on OBJ GRANT.
 - (c) Consolidate and reorganize on the northern half of OBJ GRANT (north of the 11 northing) oriented west.
 - (d) B/P to defeat the IMDR.
- (3) TM-C (Support Force-2)
 - (a) Maneuver as the northeast CO/TM in the TF VEE.
 - (b) Destroy AT ambushes in zone.
 - (c) Occupy a SBF (SE, SO) vicinity NV511100 oriented on OBJ GRANT.
 - (d) Consolidate and reorganize on the north of the east-west road at the 13 northing oriented west.
 - (e). B/P to link-up with TF 1-15 IN vicinity PL GOLD to coordinate FPOL.
- (4) TM-D (Breach Force):
 - (a) Follow CO/TMs A and C in the TF VEE formation.
 - (b) Conduct breaching operations (ME2, SO) at the TF PoP. Open, proof, and mark one lane initially to pass the Assault Force, then once OBJ GRANT is secured and IMDR defeated, continue obstacle reduction efforts to open two or more lanes.
 - (c) Link up at a checkpoint to be determined to coordinate passage of TM-B.

c. Tasks to other combat and combat support units. TBP

d. Coordinating instructions.

(1) Commander's Critical Information Requirements (CCIR).

(a) PIR:

- (1) What is the location and disposition of the AT ambush positions?
- (2) What is the location and disposition of the dismounted infantry strongpoint?
- (3) What is the location and disposition of the IMDR?
- (4) What is the location and disposition of the BTG Reserve (BTGR)?
- (5) Has the BTGR committed to the 1BCT AO?
- (6) What is the location and disposition of the DTG Reserve?
- (7) Has the DTG Reserve committed to the 1BCT AO?

(b) EEFI:

- (1) Location of the CAB's C2 nodes and retrans sites.
- (2) Location and infiltration routes of R&S assets.
- (3) Location and routes of breaching assets.
- (4) Location of PoP on OBJ GRANT.
- (5) Time and location of FPOL.
- (6) Task organization and operational readiness rate.
- (7) Mortar position areas.
- (8) Personnel and logistical status.

(c) FFIR:

- (1) Any CO/TM losing more than 4 combat vehicles (M1/M2).
- (2) Loss of obstacle breaching assets.
- (3) Loss of any C2 node/retrans asset.
- (4) Any fratricide or near-fratricide incident.

(d) IR:

- (1) Will the IMD conduct a reverse slope defense north of PL LEAD?
- (2) What is the location of the 2S1 and 2S19 battalions?

(2) Risk reduction control measures. TBP

(3) ROE. TBP

(4) Environmental considerations. TBP

(5) Force Protection. TBP

(6) Movement Instructions.

(a) The CAB quartering party is limited to twenty vehicles.

(b) CAB quartering parties will consolidate with the BCT quartering party at the BCT TOC and conduct a tactical roadmarch from TAA UTAH to ATK POS SHERMAN at 201800DEC XX. Order of march is 4-99 AR, BCT TAC, 1-15 IN, BCT TOC, 2-13 FA (-).

(7) Initial Operational Timeline.

160800 DEC	BCT OPORD
161415	WARNO #1
162000	WARNO #2
171600	BCT Rehearsal
170700	BCT Occupies TAA UTAH
180000	4-99 OPORD Issued
190800	TF Rehearsals
200100	BCT INTSUM
201400	BCT (-) units resupply with 1 st BSB prior to tactical road march
201800	BCT Quartering Party SP to ATK POS SHERMAN
202000	BCT Main Body SP TAA UTAH to ATK POS SHERMAN
202400	BCT INTSUM
210030	Recon Sqdn and CAB Scout platoon conducts RHO in zone
210545	4-99 AR LDs

4. Service Support (Support Concept). TBP

- a. Support Concept. TBP
- b. Material and services. TBP
- c. Health service support. TBP
- d. Personnel. TBP

5. Command and Control.

a. Command.

- (1) Location of the commander. TBP
- (2) Succession of command. BCT succession of command: Cdrs 1-15 IN, 4-99 AR, 7-22 CAV, BCT XO, BCT S3. 4-99 AR succession of command per SOP.
- (3) Special instructions for deputy commanders. TBP

b. Control.

- (1) Scheme of CP employment. TBP
- (2) Special instructions for CPs. TBP
- (3) Liaison requirements. TBP

c. C4 Operations.

- (1) Network operations. TBP
- (2) Signal Operating Instructions.
 - (a) SOI 23-1, Edition B, is effective upon receipt of this OPORD.
 - (b) Radio minimize is effective 160800DECXX – 210001DECXX.
- (3) Information management procedures. TBP
- (4) Recognition and identification instructions. Yellow smoke primary, Green smoke alternate; marks friendly line of troops for CAS.

ACKNOWLEDGE:

SMITH
LTC

OFFICIAL:

JONES
S3

ANNEXES:

Annex C: (Operations Overlay):

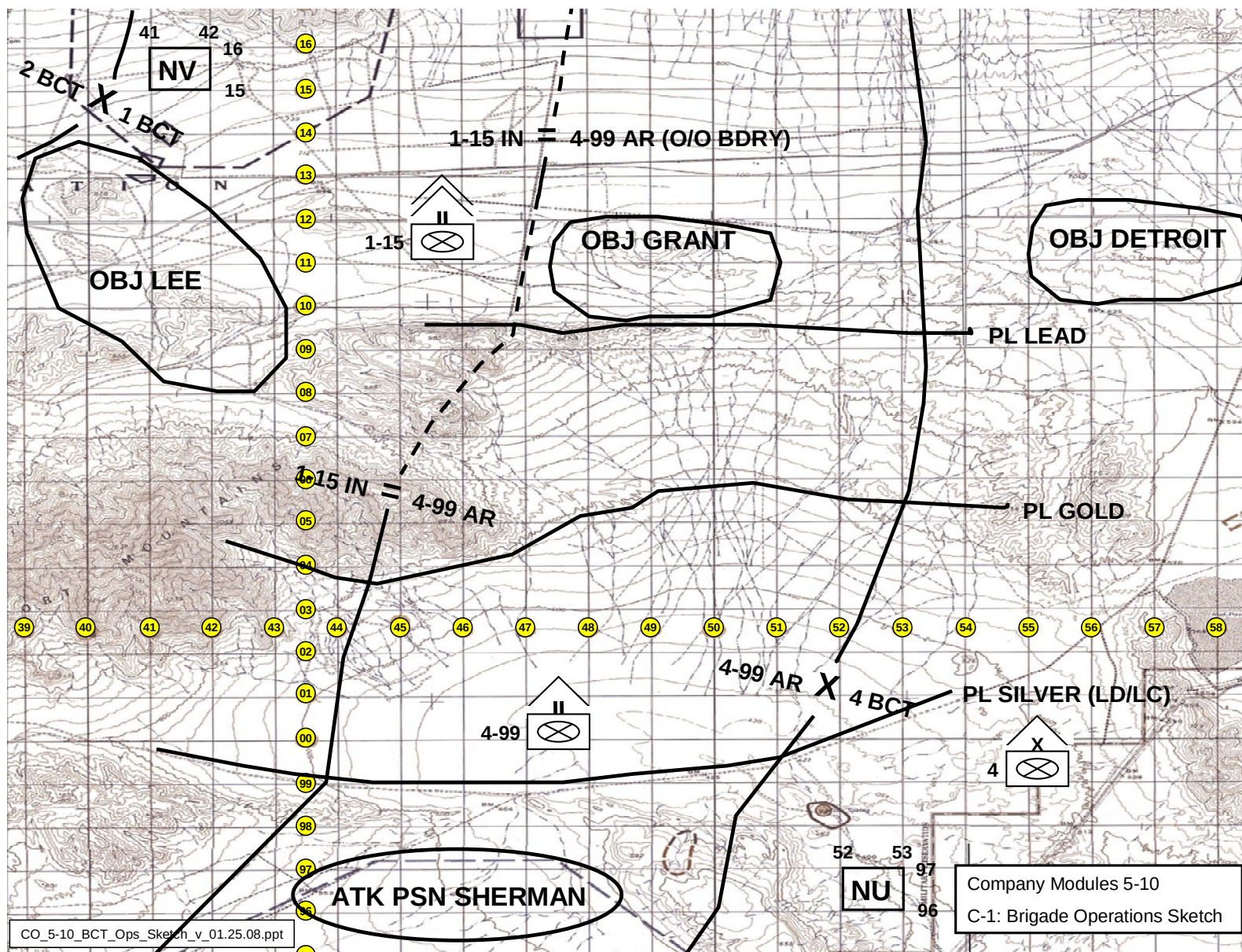
C-1: (BCT Operations Sketch)

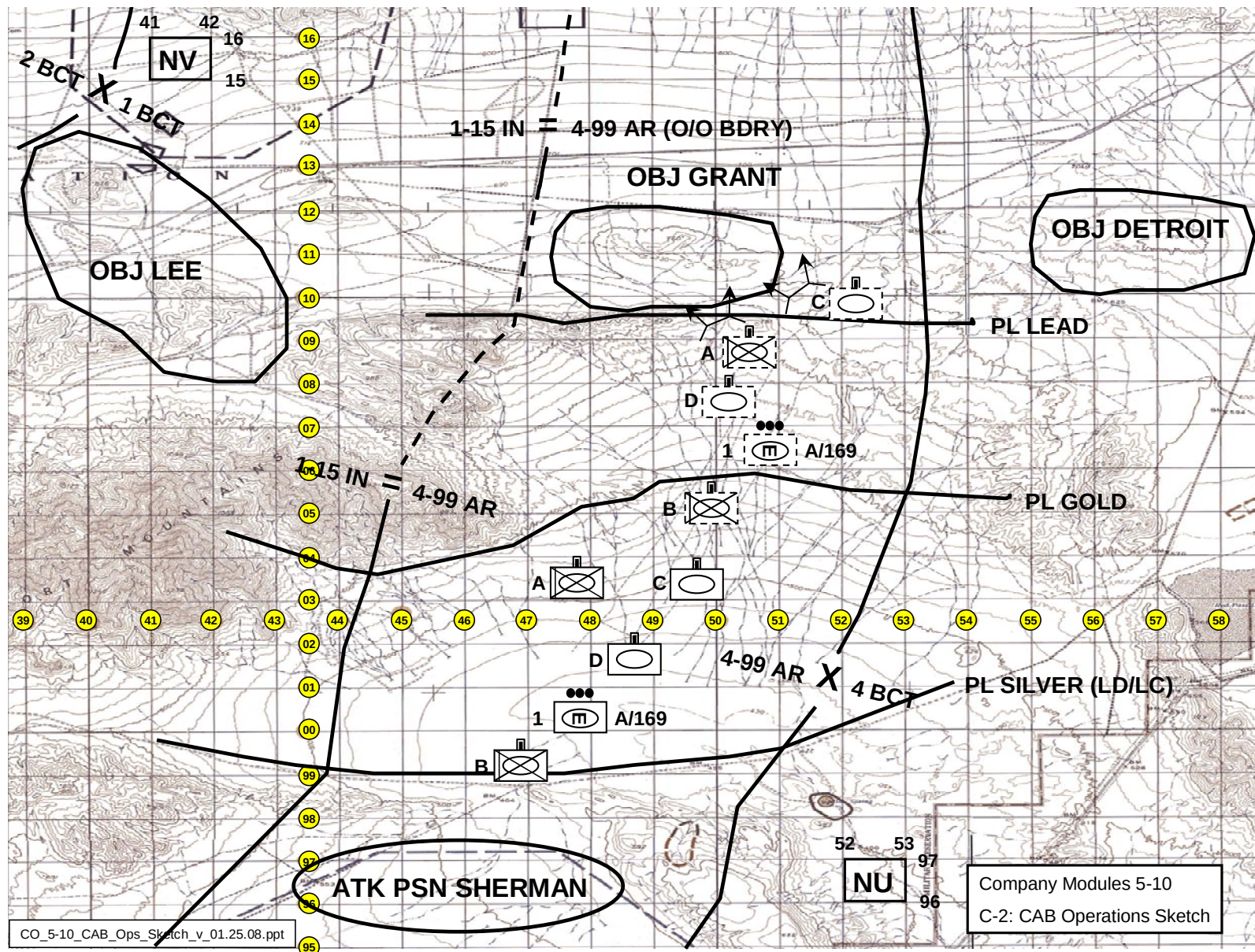
C-2: (CAB Operations Sketch)

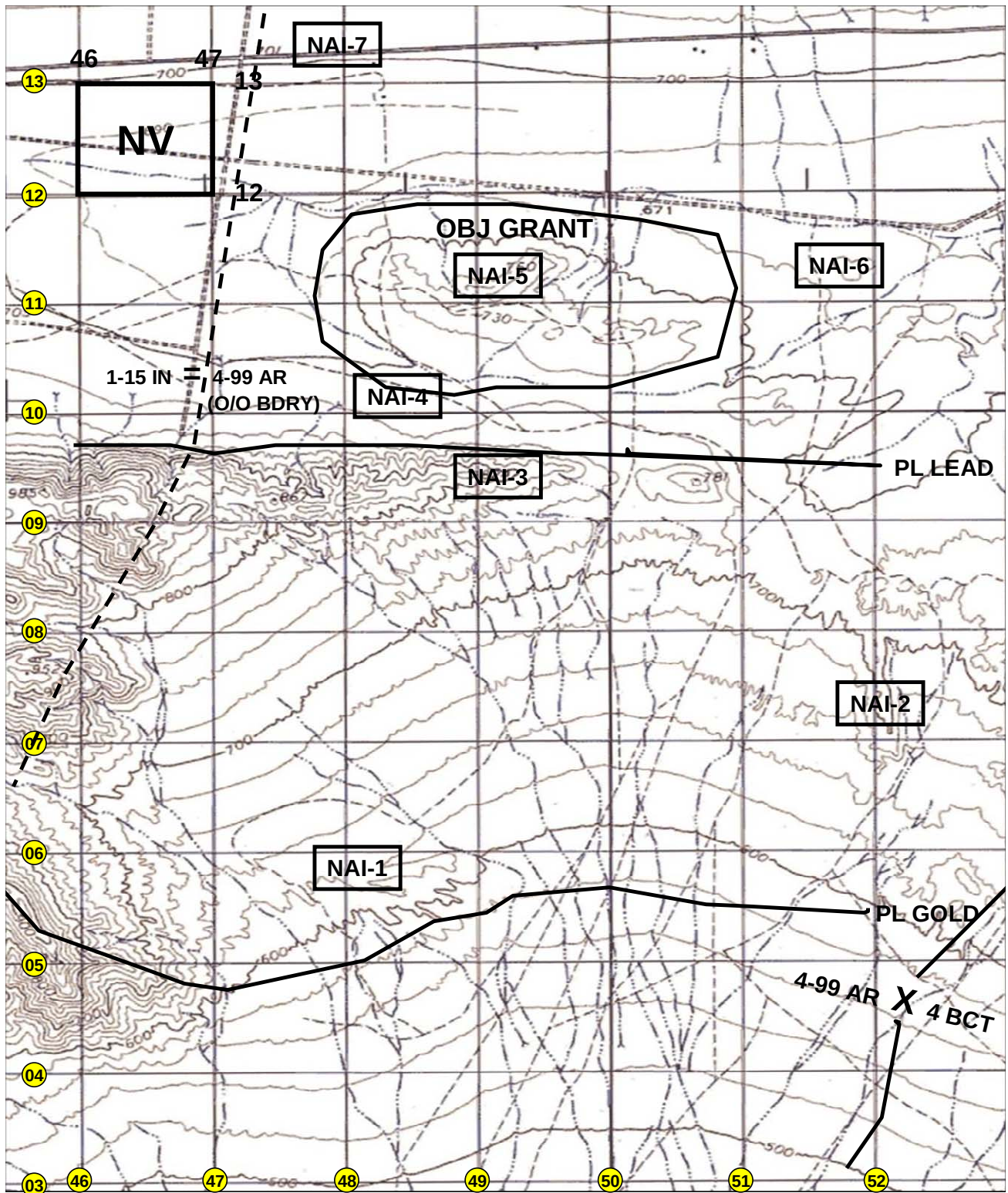
Annex L: (Intelligence, Surveillance, and Reconnaissance Operations)

L-2: (ISR Overlay)

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Company Module 5-10
L-2 ISR Overlay.

Assessment Category: Technical-Administrative Behaviors

Module #03: Visualizing the Battlefield

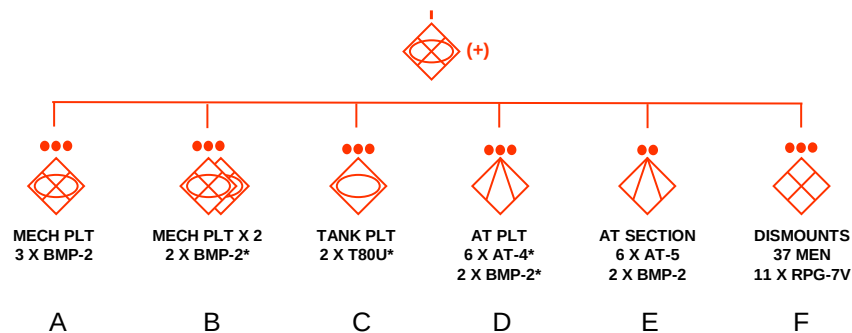
Scenario: You are the commander of TM-A/4-99 AR. The BCT has deployed as part of a multinational force in support of JTF Madera that has been conducting offensive operations to eject Coronian forces from Madera and restore the International Border. You just received the [WARNO #2](#) with attached sketches and begin integrating this information into your troop leading procedures. The CAB Commander has told you he intends to organize the CAB as follows: TM-A: Assault Force-1, TM-B: Assault Force-2, TM-C: Support Force, and TM-D: Breach Force. As you review the terrain and enemy analysis accomplished thus far by the CAB S2, you begin your own analysis of how the enemy will fight during this upcoming mission.

Questions:

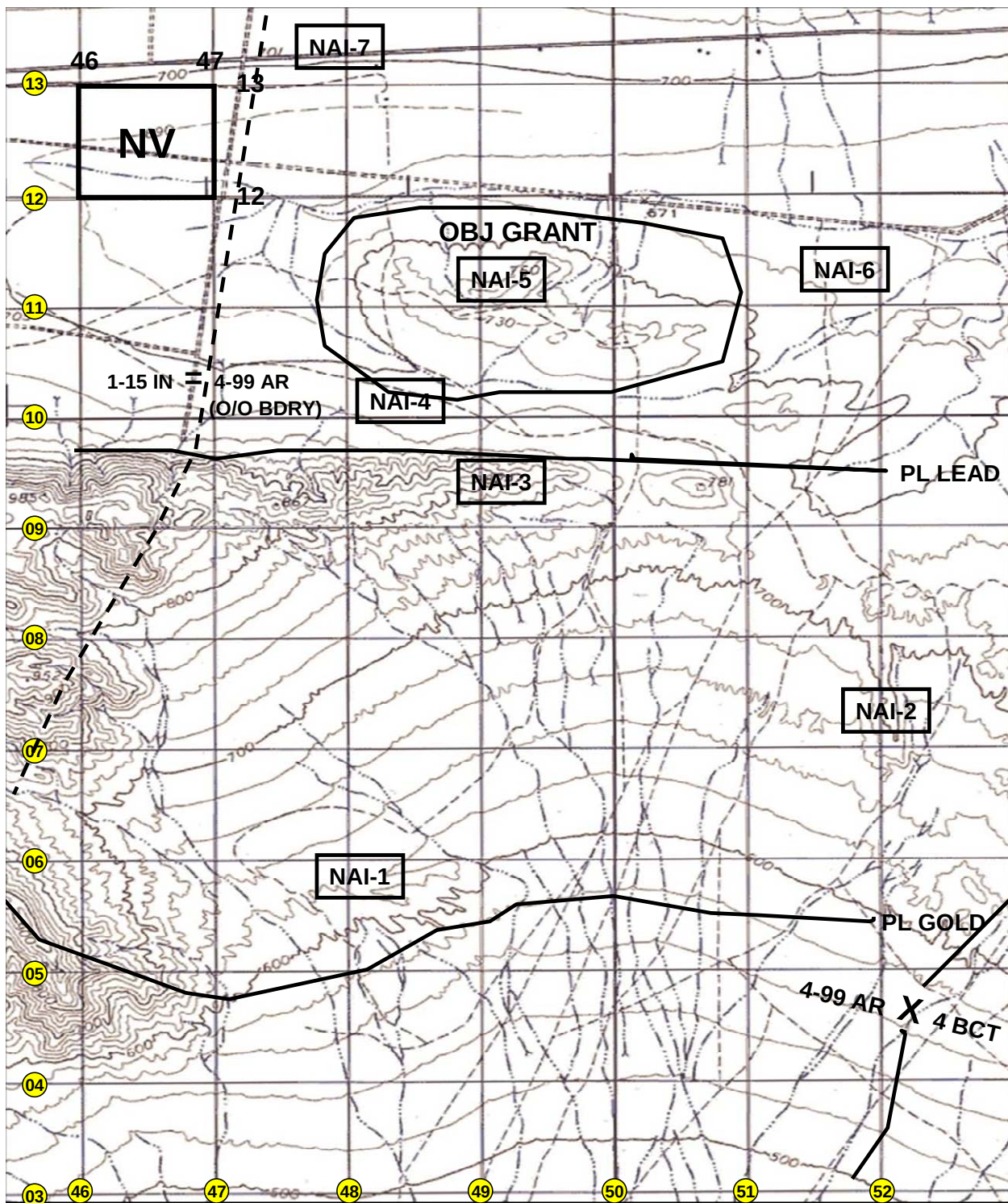
B. (Understanding) The CAB S2 has laid out several named areas of interest (NAIs) in the CAB's AO, but has not identified what he expects to find in each NAI. You review the attached overlay (next page) and decide to conduct your own analysis. (Place the letter of the most appropriate IMD element in the blank beside each NAI.)

NAI-1. _____
NAI-2. _____
NAI-3. _____
NAI-4. _____
NAI-5. _____
NAI-6. _____

Independent Mission Detachment (IMD)



* Reduced to approx 75% strength



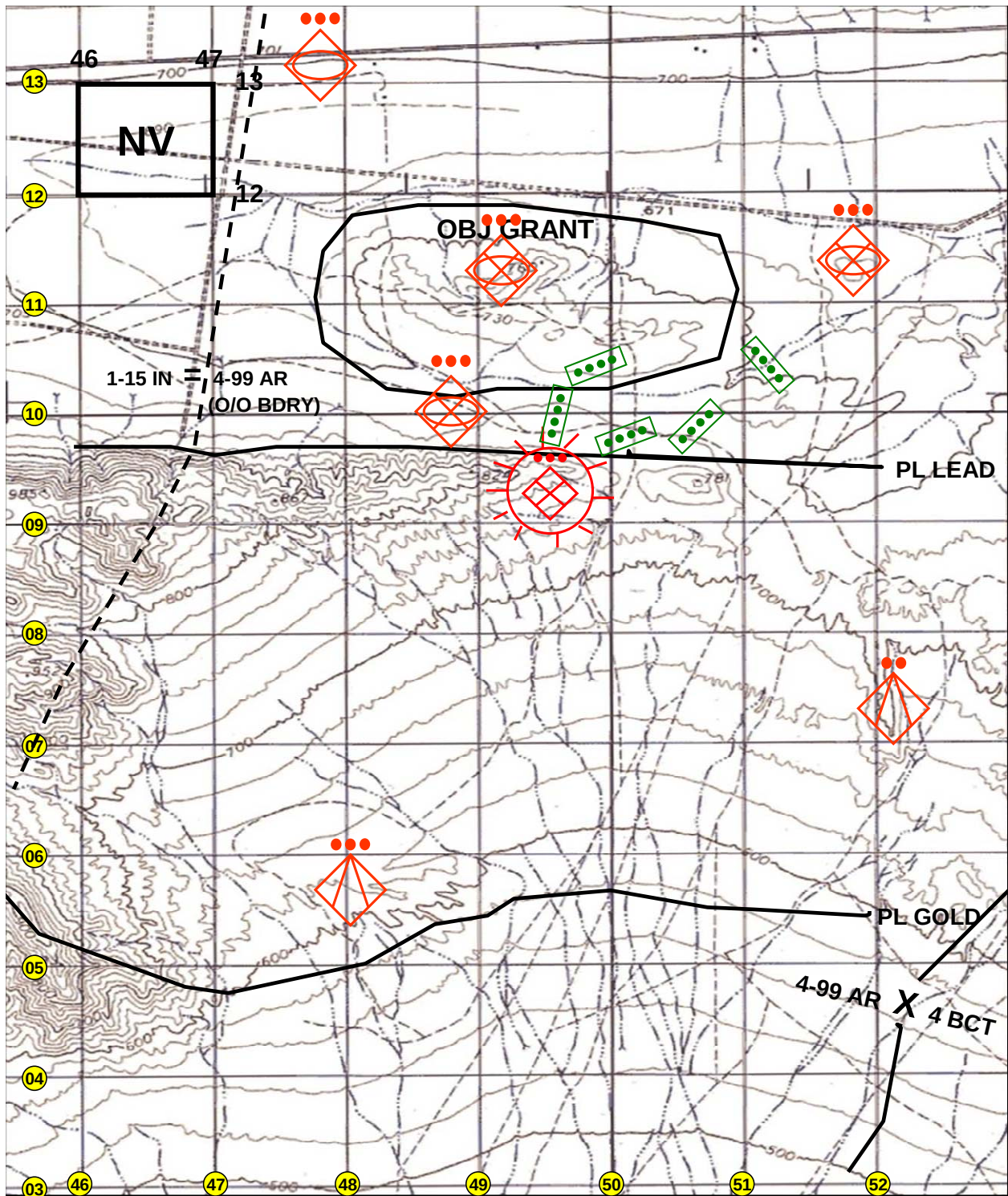
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Company Module 7
Question A.

C. (Application) As you conduct your enemy analysis, you array the IMD as shown on the attached sketch (next page). Now you determine the task and purpose for the elements in the IMD. (Place the letter of the best task/purpose next to the IMD elements below)

- a. AT Section: _____
- b. Center MIP: _____
- c. Tank Platoon: _____

- 1. Task: Attack by fire. Purpose: Disrupt the CAB's maneuver in zone.
- 2. Task: Support by fire. Purpose: Destroy the Support Force.
- 3. Task: Retain. Purpose: Disrupt the Support Force's ability to establish SBF positions on key terrain overlooking OBJ GRANT.
- 4. Task: Attack by fire. Purpose: Defeat Assault Force-2.
- 5. Task: Support by fire. Purpose: Defeat Assault Force-1.
- 6. Task: Attack by fire. Purpose: Disrupt the CAB's maneuver in zone.
- 7. Task: Attack by fire. Purpose: Destroy the Breach Force.
- 8. Task: Counter-reconnaissance. Purpose: Destroy the CAB's Scout Platoon.



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Company Module 7
Question B.

ANSWER KEY

Module #03: Visualizing the Battlefield

Question	Answer	Doctrinal Reference/Rationale
B	NAI-1: D	See WARNO #2 paragraph 1.a. (4) (a). NAI-1: AT Platoon (AT-4) from the BTG can engage the CAB as they cross the LD. Can also reinforce the MIC on OBJ LEE by moving to the West along the trail that begins at NV450065.
	NAI-2: E	NAI-2: AT Section (AT-5) from the BTG can engage the CAB to the Eastern wall of the mountain range to the West.
	NAI-3: F	NAI-3: Dismounted platoon in close terrain protects the southern flank of the IMD on Hill 760. Can engage the CAB as they approach PL LEAD and provide direct fires on Hill 781.
	NAI-4: B	NAI-4: Supporting effort MIP (2 X BMP-2) provides direct fires to protective obstacles South of OBJ GRANT.
	NAI-5: A	NAI-5: Main effort MIP (3 X BMP-2), defending in center sector per WARNO enemy most probable COA.
	NAI-6: C	NAI-7: IMD reserve positioned out of direct fire contact of CAB CO/TMs occupying SBF positions along PL LEAD.
C	a-6 or 1 b-5 c-4	See WARNO #2 paragraph 1.a. (4) (a). See rationale above.

Assessment Category: Technical-Administrative Behaviors

Module #4: Planning and Conducting Rehearsals

Scenario: You are the commander of TM-C/4-99 AR. The BCT has deployed as part of a multinational force in support of JTF Madera which has been conducting offensive operations to eject Coronian forces from Madera and restore the International Border. You have received [WARNO #2](#), are conducting your METT-TC analysis for the upcoming mission, and are considering what rehearsal type and technique you will use.

Questions:

A-1: (Recall) Match the following rehearsal types with their definitions. (Place the definition number in the blank beside each term.)

- a. Backbrief _____
- b. Support Rehearsal _____
- c. Battle Drill or SOP Rehearsal _____
- d. Combined Arms Rehearsal _____

- 1. Gives subordinate leaders time to complete their plan and requires the fewest resources. It is often the only option under time-constrained conditions.
- 2. Requires considerable resources but provides the most planning and training benefit.
- 3. Can be conducted at any time during TLP to rehearse coordination and procedures. Drills for aviation, fire, combat service, engineer support, or casualty evacuation.
- 4. Ensures that all participants understand a technique or a specific set of procedures. These rehearsals do not need a completed OPORD from higher headquarters.

A-2: (Recall) There are six different rehearsal techniques and each has its advantages and disadvantages. Match the rehearsal technique to the correct definition. (Place the definition number in the blank beside each term)

- a. Sketch Map _____
- b. Full-Dress _____
- c. Reduced-Force _____
- d. Map _____
- e. Network _____

- 1. Only critical parts of the operation are rehearsed. Requires all information systems needed to execute the operation.
- 2. This rehearsal involves the use of an overlay the same scale as the one used to plan the operation.
- 3. Involves only key leaders and is conducted on the actual or similar terrain.
- 4. Is the most time consuming of all rehearsal types, but is the most effective technique for ensuring all involved in the operation understand their parts.
- 5. In order for this rehearsal to be effective it must be large enough for all participants to see as they walk through the execution of the operation.

ANSWER KEY

Module #4: Planning and Conducting Rehearsals

Question	Answer	Doctrinal Reference/Rationale
A-1	a-1	FM 5-0, para 4-55 states that the backbrief differs from the confirmation brief in that subordinate leaders are given time to complete their plan. Backbriefs require the fewest resources and are often the only option under time-constrained conditions. Subordinate leaders explain their actions from start to finish of the mission. Backbriefs are performed sequentially, with all leaders going over their tasks.
	b-3	FM 5-0, para 4-59 states that at any point in TLP, units may rehearse their support for an operation. For small units, this typically involves coordination and procedure drills for aviation, fire, combat service, engineer support, or causality evacuation.
	c-4	FM 5-0, para 4-60 states a battle drill or SOP rehearsal ensures that all participants understand a technique or a specific set of procedures.
	d-2	FM 5-0 4-56 states that a combined arms rehearsal requires considerable resources, but provides the most planning and training benefit. Depending on circumstances, units may conduct a reduced force or full dress rehearsal.
A-2	a-5	FM 6-0 F-21 states effective sketches are large enough for all participants to see as each participant walks through execution of the operation. Participants move markers on the sketch to represent unit locations and maneuvers.
	b-4	FM 6-0 F-14 states a full-dress rehearsal produces the most detailed understanding of the operation. F-15 states full-dress rehearsals are the most time consuming of all rehearsal types.
	c-3	FM 6-0 F-16 states a reduced-force rehearsal involves only key leaders of the organization and its subordinate units.
	d-2	FM 6-0 F-22 states A map rehearsal is similar to a sketch-map rehearsal, except the commander uses a map and operation overlay of the same scale used to plan the operation.
	e-1	FM 6-0 F-24 states These rehearsals require all information systems (INFOSYS) needed to execute that portion of the operation.

Assessment Category: Adaptive Skill

Module #5: Handling Ad Hoc Task Organization

Scenario: You are the commander of A Company, 1-54 IN (CAB). Your BCT is deployed as part of a multinational force in a developing African nation. The BCT is involved in the latter phases of an aggressive clear-hold-build operation in their area of responsibility. A Company has the mission of continued security operations to interdict insurgent movements in the rural region and secure the villages, continue to train local police and border security forces, rebuild the local school, and improve water distribution facilities and sanitation. You just received a WARNO. To assist you in your mission and begin the transition away from U.S. military control, you will have an engineer water purification section from a coalition partner (German Army) assigned to your Company Team. Additionally, the WARNO informs you that a medical assessment and treatment team (10 personnel) from a nongovernmental organization (NGO) will be deploying into your AO. The medical team will be composed of doctors and medical specialists from Canada, Spain, and France.

Questions:

A: (Recall) What principles will govern your relationship with the NGO medical team? (Circle the BEST answer.)

- a. The relationship will be based on U.S. monetary contributions (both government grants and private contributions) to the operations of the NGO. As a rule of law, if the U.S. finances the NGO in any way, the team will be subject to military controls and authority.
- b. All NGOs entering the AO must sign a memorandum of understanding with the multinational force command. The NGO elements will be subject to military controls and authority.
- c. Unity of command and unity of effort are key principles of counterinsurgency operations. The medical team will be under the control of and report to the senior military physician, medical specialist, or medic in the area where they are operating.
- d. The medical team brings medical expertise and services that readily complement your efforts. They may rely on you to create a secure environment for their operations, but they may desire to operate independently.

B: (Understanding) What command and support relationship will most likely be specified or established for each element? (Circle the BEST answer.)

a. The water purification section is coming from a NATO partner. They will be assigned in an OPCON command and support relationship common for elements within NATO nations.

b. In accordance with U.S. Joint Forces Doctrine, all NGOs permitted in a theater of operations must sign memorandum of understandings placing them under the control of U.S. forces. The NGO personnel must follow your orders.

c. The agreements that established the multinational force may specify the command, support, and other relationships with the German water purification section.

C: (Application) Your area is approaching stability in security. However, a joint patrol encountered a sniper two days ago. One of the very successful aspects of the build phase of your operation has been the medical "sick calls" run by your medics in area villages. From time to time, the CAB's Surgeon and Physicians Assistant (PA) have assisted your medics. This effort has enhanced your relationship with the local populace and resulted in improved intelligence reporting and tips on suspected insurgent activities. You are about to have your initial meeting with the NGO medical team. What information and recommendations would you include in your briefing that will assist you in accomplishing the goals of your current operation and support the aims of the medical NGO? (Circle ALL that apply.)

a. Inform the NGO team of the current security situation and dangers.

b. Recommend your medics or the CAB Surgeon or PA brief them on findings and ongoing treatments or ailments of some of the patients.

c. Request a schedule of their activities and travel.

d. Recommend security procedures for the NGO personnel and inform them of local security precautions coordinated with the host nation authorities.

ANSWER KEY

Module #5: Handling an Ad Hoc Task Organization

Question	Answer	Doctrinal Reference/Rationale
A	d	FM 3-24, para 2-8 states that, "... civilian organizations bring expertise that complements that of military forces. At the same time, civilian capabilities cannot be employed effectively without the security that military forces provide. Effective COIN leaders understand the interdependent relationships of all participants." Also, see para 2-30 above.
B	c	FM 3-24, para 2-11 explains that although unity of command is desirable in all operations it may not be practical due to political considerations and realities. The agreements that establish a multinational force may provide a source for determining authorities, command, support, and other relationships.
C	a b c d	FM 3-24, paras 2-13, 2-14, 2-15, 2-16, and 2-30. These paragraphs discuss the need for unity of effort and the use of coordination, liaison, and persuasion in dealing with NGOs. All responses support this approach to accomplishing the goals of the company's operations and those of the NGO medical team.

Assessment Category: Adaptive Skill

Module #6: Receiving a Poorly Defined Mission

Scenario: You are commander of an Infantry company that has just completed combat operations to clear a neighboring AO of insurgent activity. You have occupied an AO near a medium-sized village that, up until now, has been a calm area. The latest update from the S2 mentions that there may be some insurgent activity in the area, but most of the activity appears to be crime-related. Local tensions in the area seem to be rising due to the presence of U.S. forces. The tribal leader has informed you that his people are supportive of the U.S. but are worried that your company's presence will only attract insurgents to his village. You have been ordered to conduct daily foot patrols through the village beginning tomorrow morning.

Questions:

A: (Recall) Of the two main types of patrols (combat and presence), your initial assessment is that this mission is best suited for a presence patrol. What are some of the characteristics of presence patrols? (Circle the BEST answer.)

- a. Planning considerations and execution of presence patrols are much different from combat patrols.
- b. Planning, preparation and execution of presence patrols are similar to combat patrols.
- c. Presence patrols are often used when enemy contact is likely since they are generally using a movement to contact model.

B: (Understanding) As you develop your concept of operations for tomorrow's patrol, what planning and execution steps do you intend to take? (Circle ALL that apply.)

- a. Minimize your company's presence in the village to alleviate the tribal leader's fears.
- b. Plan for a slow and even pace to promote a relaxed and confident attitude towards the local population.
- c. Plan for a quick pace to minimize your company's footprint and to counteract the potential IED threat.
- d. Plan and rehearse actions in and around large crowds of noncombatants.
- e. Request a tank platoon to augment your company as a reaction force until you can confirm or deny insurgent activity in the AO.

ANSWER KEY

Module #6: Receiving a Poorly Defined Mission

Question	Answer	Doctrinal Reference/Rationale
A	b	FM 3-21.10, para 6-66 states that "The Infantry company and platoons conduct a presence patrol much the same as a combat patrol, and the planning considerations are similar."
B	b	FM 3-21.10, para 6-67 planning considerations include: "The speed of the patrol should normally be slow and even promoting a relaxed and confident attitude towards the local population except where the current IED threat calls for high speed movement. It also enables patrol members to concentrate on the urban environment and the population, which increases their ability to gather information."
	d	FM 3-21.10, para 6-67 planning considerations include: • "Leaders and Soldiers must plan for and rehearse actions in and around large crowds of civilians or noncombatants." • "Ensure there is a contingency plan for dealing with large crowds of noncombatants or large hostile crowds."

Assessment Category: Adaptive Skill

Module #7: Remaining Flexible To Meet Contingencies

Scenario: You are the commander of an Infantry company/team. You have just received a WARNO from your battalion and have started troop leading procedures. Your mission is to serve as the TF reserve. Your priority for employment is to occupy an attack by fire position to block enemy penetrations along the main avenue of approach, reinforce the main effort company/team's battle position, and assume a supporting effort company/team's mission along the secondary avenue of approach.

Questions:

C. (Application) The execution of a reserve mission requires flexibility and thorough contingency planning to remain responsive to the TF Commander. What are some of the planning factors you should consider? (Circle ALL that apply.)

- a. Position your company/team in a location to respond to the most likely contingency since you can't plan for all possible contingencies.
- b. Rehearse the time it takes for your company/team to move from your reserve position to each battle position or attack by fire position in all conditions (day, night, and CBRN conditions).
- c. Plan for countermobility and survivability assets to be allocated to you since you will be the main effort once committed.
- d. Develop direct and indirect fire plans for each contingency.
- e. Plan for conducting an assault to complete destruction of the enemy force.
- f. Plan relief in place operations to reinforce the main effort company/team.
- g. Plan relief in place operations to assume the BPs of the supporting effort company/teams.

ANSWER KEY

Module #7: Remaining Flexible To Meet Contingencies

Question	Answer	Doctrinal Reference/Rationale
C	b	FM 3-90.1, para 6-107 states that, "The commander also must calculate time-distance factors for each axis. The time required moving between the reserve position and each contingency BP or attack by fire position must be forwarded to the controlling headquarters to assist in the synchronization of the higher plan." Rehearsals in all conditions are professional military judgment.
	d	FM 3-90.1, para 6-108 states that, "He must also conduct direct fire planning for all contingencies. Depending on the designated priorities, the level of planning and preparation will vary for each contingency. For example, the commander may specify a mounted rehearsal for the most likely mission, but limit planning for contingencies of lower priority to a leader's reconnaissance. Para 6-110 goes on to say, "The company team commander and FSO must develop fire support plans to support the EA(s) designated for each reserve contingency."
	g	FM 3-90.1, para 6-117 states that, " In assuming the mission of another company team (or another type of unit, if applicable), the reserve force first conducts a relief in place. The now committed reserve then continues the mission, such as defense of a BP."

Assessment Category: Adaptive Skill

Module #8: Receiving an Under-Resourced Mission

Scenario: You are the commander of A-Company, 1- 54 IN (CAB). Your BCT is deployed as part of a multinational force conducting counterinsurgency operations. The BCT is currently executing the clear and hold phases of an aggressive clear-hold-build operation in their AO. Your company has the mission of securing three local villages and continuing security operations to interdict insurgent movements in rural areas. You have also voluntarily initiated rebuilding a local school and holding twice weekly “sick call” clinics in each village to treat minor medical problems, identify serious medical conditions for treatment by BCT medical teams, and curb local illnesses and the spread of diseases. This morning, the CAB S3 sends you a WARNO to prepare to provide convoy escort and security for a shipment of humanitarian aid (food and medical supplies) coming into your AO this afternoon.

Questions:

A: (Recall) Your initial assessment is that you will not be able to execute this mission without affecting your current operations and that your company has become a victim of “mission creep.” What are the types or sources of mission creep that can potentially impact U.S. forces conducting counterinsurgency operations? (Circle the BEST answer.)

- a. Units receive shifting guidance or a change in mission that they are not resourced to accomplish.
- b. Units receive added humanitarian requirements directly from international governmental organizations (IGOs) and/or nongovernmental organizations (NGOs).
- c. Commanders have extensive obligations under international law to alleviate suffering, avoid collateral damage, and avoid any unnecessary injury to noncombatants.

B: (Understanding) What are the best means of avoiding or mitigating “mission creep” during counterinsurgency operations? (Circle the BEST answer.)

- a. Limit unit operations and activities to only those assigned by your higher headquarters.
- b. Give commanders and subordinates the latitude to delay execution of, refuse, or ignore missions that they feel over extend their capabilities.
- c. Ensure that commanders and staffs conduct a complete mission analysis to identify missions and tasks and the resources required to execute them
- d. Give priority to missions that affect the political objectives and reduce the emphasis on military operations. Most disconnects and “mission creeps” occur when combat operations go too far.

C: (Application) Your Company is continuing security operations and receives a WARNO to secure and repair a 2 km section of a highway adjacent to your AO. This segment of highway was the scene of fierce fighting and was heavily damaged early in the conflict. It was also the site of several IED ambushes, the latest occurring four weeks ago. Your mission analysis and leader's recon indicate that you have sufficient forces to secure the section of highway, but the repairs are well beyond what your Company can perform. What actions should you take? (Circle the BEST answer.)

- a. Request immediate augmentation by an engineer construction battalion.
- b. Inform the CAB that the mission is well beyond your capabilities. Ask that your Company be removed from consideration for the mission.
- c. Inform the CAB that you have the capacity to secure the area only and recommend that engineers be sent to evaluate the needed repairs.
- d. Inform the CAB that you have the capacity to secure the area only and recommend that the BCT's engineer company be attached to you.
- e. Inform the CAB that the mission needs to be assigned to an engineer highway construction battalion and you are prepared to be attached to them as their security force.
- f. Inform the CAB that repairs should be handled by HN contracted support and secured by HN forces since the area seems secure.

ANSWER KEY

Module #8: Receiving an Under-Resourced Mission

Question	Answer	Doctrinal Reference/Rationale
A	a	FM 3-90.5, para 8-11 states that, "Commanders and Soldiers have a natural tendency to do more than the mission requires, especially when faced with human suffering. This is often called "mission creep." However, well-intentioned actions can be especially dangerous in stability operations, where they can threaten impartiality as well as undermine long-term programs. There are two types of mission creep. First is the type that occurs when the unit receives shifting guidance or change in mission for which the unit is not properly configured or resourced; or if it is beyond legal authority of the Army. The second type of mission creep occurs when a unit attempts to do more than is allowed in the current mandate and mission. The best guard against mission creep is for the commander and staff to conduct a complete mission analysis, taking into account the interim and potential end states."
B	c	See the extract from FM 3-90.5, para 8-11 above. A thorough and complete mission analysis of all missions, tasks, and activities in light of the end state is the best way to avoid mission creep. Higher headquarters should be careful not to overload units and units should inform their higher headquarters of missions and risks beyond their capabilities.
C	c	See the extract from FM 3-90.5, para 8-11 above. The WARNO should trigger a mission analysis and leader's reconnaissance. The company commander's assessment during mission analysis and his leader's recon indicate that he has the capacity to secure the area, but unless he is specially trained, he could not accurately assess the repair requirements. Informing the CAB of what he can do and recommending an engineer assessment is the best option.

Assessment Category: Adaptive Skill

Module #9: Understanding Foreign Cultures

Scenario: You are the commander of D-Company, 1- 70 IN (CAB). The BCT has been alerted for deployment as part of a multinational force conducting stability operations in the U.S. African Command (AFRICOM) area of responsibility. No other U.S. forces have deployed to this country before.

Questions:

A: (Recall) Part of your pre-deployment training will be the cultural preparation of your unit. Select from the list below resources that would best assist with you with this training. (Circle ALL that apply.)

- a. Google search of the targeted country.
- b. The Central Intelligence Agency (CIA) Fact Book for the country.
- c. The current Rules of Interaction (ROI) for the area of operations.
- d. Current newspapers and periodicals outlining current events in country.

B: (Understanding) What are the best means to avoid the potential of U.S. Soldiers offending the cultural sensitivities of the local populace during stability operations? (Circle the BEST answer.)

- a. Limit or deny all junior enlisted Soldier contact with the local population and closely control the contacts of NCOs and junior company grade officers.
- b. Train Soldiers on Rules of Interaction (ROI). The ROI can only be effective if every Soldier in the unit understands and rehearses them.
- c. Negotiate with local leaders to suspend some restrictive cultural rules. American Soldiers are deployed to protect and defend them and should be allowed some latitude.
- d. Culturally inappropriate behaviors or language may be impossible to avoid. Soldiers should be permitted to unwind, blow off steam, and do these things away from the local populace in forward operating bases (FOBs) and secured areas.

ANSWER KEY

Module #9: Understanding Foreign Cultures

Question	Answer	Doctrinal Reference/Rationale
A	b	Professional military judgment. The CIA Factbook is available in an unclassified form and is updated annually.
	c	FM 3-21.10, para 6-17 states, "The ROI are based on the ROE and are tailored to the specific regions, cultures, and populations affected by the operation. They provide a foundation for relating to people and groups who play critical roles in the operations. They cover an array of interpersonal communication skills such as persuasion and negotiation. They provide tools for the individual Soldier to deal with the nontraditional asymmetric threats that prevail in stability operations. These include political friction, religious and ethnic differences, unfamiliar cultures, and conflicting ideologies. Thus, the ROI help keep the Soldier out of trouble, which naturally enhances survivability. Every Soldier must know and understand the ROI. This means they must be thoroughly briefed and rehearsed."
B	b	See rationale for Question A, answer d, above.

Assessment Category: Adaptive Skill

Module #10: Engaging the Local Community

Scenario: You are the commander of C-Company, 1- 69 IN (CAB). Your BCT is deployed as part of a multinational force conducting counterinsurgency operations in a developing Western Atlantic island nation. The BCT has successfully executed an aggressive clear-hold-build operation in their AO and is currently handing over security responsibilities and ongoing civic action projects to the HN. Incidents, civilian deaths, and military casualties are at record lows in the AO. The local populace is friendly; children greet many patrols and role play U.S. Soldiers.

The CAB has received a WARNO to redeploy to a new AO in an adjacent province. The timing and details of the transition have remained close-hold; your CAB commander's guidance is to remain focused on the current operation. The CAB commander, S3, and S2 have conducted the initial leader's reconnaissance, flying over the new AO. They also met with HN security officials and members of the SOF unit that has been working in the AO for the past 3 months. Their initial briefing to you and the other company commanders indicates that you will be moving into fairly primitive surroundings. Unlike the friendly population of your current AO, the populace in the new region is neutral. SOF elements have just begun to work with HN security forces and disrupt insurgent operations.

Questions:

A: (Recall) In accordance with the CAB commander's guidance, your company leadership has maintained a focus on the current mission, but he wants you to begin planning for your new mission. You understand that there will be some leadership challenges associated with the move and new mission. What principles can be applied as you prepare your unit for the new mission, a new AO, and working with a different population? (Circle the Best Answer)

a. Assessment metrics will be the same for the new AO. For example, with a neutral populace and a more active insurgent force, numbers of captured and killed insurgents and captured documents and equipment should increase.

b. Many of the experiences you have had working with the populace and operating in your current AO may be applied to the new area. You and your Soldiers can focus on what is different in the new AO making many aspects of your mission easier and faster.

c. Friendly forces will cede the initiative for a time in the new AO, but the populace will hear about your reputation and begin to respect you more than the insurgents. You can expect rapid results as local leaders seek your support, protection, and open discussions on possible projects and options.

C: (Application) As you begin to initiate the clear phase of your current operation, you recall that IO paved the way for engaging the local leaders and populace in your old AO. What IO themes focused at the local populace assisted your effort? (Circle the BEST answer)

a. The ongoing combat operations being conducted by U.S. and HN forces are directed at the insurgents. Your unit will conduct continuous security operations to protect the people cooperating with U.S. and HN forces from insurgent reprisals.

b. With the presence of U.S. and invigorated HN forces, insurgent forces are surrendering or ceasing their activities.

c. HN forces, supported by U.S. military power, will win, and the local populace should support and cooperate with their efforts or expect reprisals.

ANSWER KEY

Module #10: Engaging the Local Community

Question	Answer	Doctrinal Reference/Rationale
A	b	FM 3-24, para A-57 states that, "Efforts made preparing for operations in one AO are not wasted if a unit is moved to another area. In mastering the first area, Soldiers and Marines learned techniques applicable to the new one. For example, they know how to analyze an AO and decide what matters in the local society. The experience provides a mental structure for analyzing the new AO. Soldiers and Marines can focus on what is different, making the process easier and faster. They need to apply this same skill when they are moved within battalion or brigade AOs."
C	a	FM 3-24, para 5-59 states that, "Operations to clear an area are supplemented by IO focused on two key audiences: the local populace and the insurgents. The message to the populace focuses on gaining and maintaining their overt support for the COIN effort. This command theme is that the continuous security provided by U.S. and HN forces is enough to protect the people from insurgent reprisals for their cooperation. Conversely, the populace should understand that actively supporting the insurgency will prolong combat operations, creating a risk to themselves and their neighbors. The command message to the insurgents focuses on convincing them that they cannot win and that the most constructive alternatives are to surrender or cease their activities."

APPENDIX B

BATTALION STAFF COMPETENCIES SITUATIONAL JUDGMENT TEST

LIST OF MODULES

Area	Module	Pg #
Technical – Administrative Behaviors	1. Updating/Refining ISR Plan	B-3
	2. Understanding All Available Assets	B-30
	3. Developing a Mission Statement	B-33
	4. Developing COA Statement and Sketch	B-35
	5. Performing COA Analysis	B-47
	6. Knowing Own Role, Responsibilities	B-52
	7. Managing Combat Information	B-54
	8. Exploiting All Staff Functions	B-56
	9. Conducting Mission Analysis	B-58
Adaptive Skill / Leadership Behaviors	10. Directing Casualty Evacuation	B-62
	11. Managing Time and Tasks	B-65
	12. Maintaining Focus on Mission, Higher Intent	B-69
	13. Seeing the Big Picture	B-74

Assessment Category: Technical-administrative Behaviors

Module #01: Updating/Refining ISR Plan

Scenario: You are the Assistant S-3 (A/S-3) of 4-99 AR. You have just received 1-74 HBCT [WARNO #2](#) and have begun MDMP Step 2 (Mission Analysis). You are reviewing the BCT's PIRs, Annex C (Operations Sketches), Annex L (ISR), and Appendix 1 (ISR Overlay) to Annex L as part of the mission analysis step in the MDMP.

Questions:

A: (Recall) You know that the ISR Process is a continuous six-step process to feed relevant information to facilitate the commander's situational understanding. What statements below are true of Step 1 (Develop Requirements) in the ISR Process at the CAB-level? (Circle ALL that apply.)

- a. The CAB S-2 is the chief ISR integrator.
- b. The S-3 assists the S-2, along with the rest of the staff.
- c. The CAB S-2 supervises synchronization and execution of the ISR plan.
- d. The CAB S-3 supervises synchronization and execution of the ISR plan.
- e. The staff develops IRs during mission analysis and wargaming as part of the MDMP.
- f. The staff develops IRs during mission analysis and following COA approval.
- g. IRs and PIRs are sorted to eliminate redundancies and prioritized to assist in allocating resources.
- h. IRs and PIRs feed CCIR. Once the commander approves the CCIR, they are set until the current operation is complete.
- i. IRs are broken down into indicators, which are further developed into SIRs to ask very specific questions about those indicators.

Scenario continued: You have completed your review of [WARNO #2](#), Annex C (Operations Sketches), Annex L (ISR), and Appendix 1 (ISR Overlay) to Annex L. Based on your review, you believe the BCT has tasked the CAB to do the following:

- Conduct zone reconnaissance 092100CAPR2010.
- Conduct RHO at PL RUBY and conduct area reconnaissance of NAI 80 to confirm MIC and obstacle locations on OBJ TIGER.
- Develop detailed ISR plans that include coverage of assigned NAIs and nominations for CAB NAIs and submit supporting plans to the BCT S-3 NLT 051600CAPR2010.

[WARNO #2](#) contained the following BCT PIRs:

1. What will be the size, composition, and location(s) of the BTG and 1/247 MIB reconnaissance forces?
2. What is the location and disposition of the AT Battery in the BCT's AO?
3. What is the disposition and location of the BTGR?
4. What will be the size, composition, and main effort of the 247th BTG forces in the BCT's AO?
5. Indications of movement of chemical munitions moving forward to firing units that can affect 1-74 HBCT.

The CAB S-2 is refining the current BCT SITEMP as part of the mission analysis step of the MDMP. The BCT SITEMP templates the platoons from the AT Battery in NAIs 65 and 75, the two MICs at NAIs 80 and 90, and potential ABF positions for the BTGR at NAIs 100, 110, 120, and 130. The CAB XO and S-3 have asked you to focus your efforts on developing SIRs for BCT PIRs 1, 2 and 4 and BCT NAIs 65 and 80 for the initial ISR plan for CAB [WARNO #2](#).

B: (Understanding) From the list of potential SIRs below, select the recommended SIRs to answer BCT PIRs 1, 2 and 4. (Circle ALL that apply.)

- a. What will be the size, composition, and location(s) of the BTG and 1/247 MIB reconnaissance forces?
- b. Are elements of the BTG Reconnaissance Company west of PL ATLANTA?
- c. Are elements of the MIB Reconnaissance Platoon west of PL ATLANTA?
- d. What is the location and disposition of the AT Platoon in the CAB's AO?
- e. Is there an AT Platoon at NAI 65?
- f. Are there 2-3 9P162 ATGM vehicles at NAI 65?
- g. Are there 2-3 MT-12 AT Guns at NAI 65?
- h. What is the location and disposition of the MIC on OBJ LION?
- i. What is the location and disposition of the MIPs on OBJ LION?
- j. Are there MIPs at NAIs 81, 82, and 83?
- k. Are there 3-4 BMPs each in NAIs 81, 82, and 83?

ANSWER KEY

Module #01: Updating/Refining ISR Plan

Question	Answer	Doctrinal Reference/Rationale
A	e g i	FM 3-90.5, para 4-12 states that, "The staff develops IRs during mission analysis and war gaming as part of the MDMP." FM 3-90.5, para 4-14 states that, "As the staff gathers all of the IRs and PIRs, they sort the requirements to eliminate redundancies, and prioritize them to assist in allocating resources. The commander then re-evaluates each requirement and finalizes his CCIR. This is a continuous process; as a given CCIR is answered or the operational situation changes, other CCIRs usually are generated." FM 3-90.5, para 4-15 states that, "Ideally, each IR is detailed and specific enough to facilitate collection. Once the commander approves the IR, he breaks the IR down into indicators. He then develops specific information requirements (SIR) to ask very specific questions about indicators. Finally, the commander tasks these indicators to collectors and, taken together, they answer the larger question."

Question	Answer	Doctrinal Reference/Rationale
B	f g k	Professional military judgment. The staff has not yet developed and wargamed COAs and developed recommended CAB CCIR and an ISR plan to support the recommended COA. The recommended SIRs provide as much specificity as possible given the information provided thus far. h. Are there 2-3 9P162 ATGM vehicles at NAI 65? Supports PIR #2, see MIB OB. i. Are there 2-3 MT-12 AT Guns at NAI 65? Supports PIR #2, see MIB OB. m. Are there 3-4 BMPs each in NAIs 81, 82, and 83? Supports PIR #4, see MIB OB. Since CABS template down to the platoon-level, NAI 80 on OBJ LION was refined into three NAIs to identify the MIPs. FM 3-90.5, para 4-13 states that, "Regardless of the source, each IR should specify: • WHAT (activity or indicator). • WHERE (NAI or TAI). • WHEN (time that the indicator is expected to occur and the latest time the information is of value). • WHY (justification - what decision is the PIR linked to). • WHO (who needs the results)." FM 3-90.5, para 4-15 states that, "Ideally, each IR is detailed and specific enough to facilitate collection. Once the commander approves the IR, he breaks the IR down into indicators. He then develops specific information requirements (SIR) to ask very specific questions about indicators. Finally, the commander tasks these indicators to collectors and, taken together, they answer the larger question. For example: one of the CAB commander's PIR is "Will the enemy regiment attack through avenue of approach 2 with battalions abreast, or from the march?" This is a broad question and many indicators could lead to its answer. SIR to support this PIR might include: • Will enemy units of 3-5 combat vehicles enter NAIs 11, 12, and 13 between 130400MAR and 130700MAR? • Will enemy battalion #2 move from its assembly area at NAI 7 prior to 130230MAR? • Identification of second enemy battalion (over 40 BMP2s) in NAI 11, 12, or 13.

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Required for Battalion Modules 1-5

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030800CAPR2010
Message Number 2010-04-22-1

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References:

- a. Maps, NIMA Series K753, N707, 1:50,000 Scale.
- b. Maps, NIMA Series 1501A Series 1501A, Joint Operations Graphic–Air (JOG-A), 1:250,000 Scale.
- c. CJFLCC OPORD 4567-10 (PRINCIPLE STRIKE).
- d. OPORD, X CORPS 2010-02 (POSITIVE STRIKE).
- e. OPORD: 74 ID 2010-04 (OPERATION IRONHORSE FURY).

Time Zone Used Throughout the Order: CHARLIE.

Task Organization: See Annex A.

1. SITUATION.

a. **Enemy forces.** See Annex B (TBP)

(1) Overview. The area between the Black Sea and the Caspian Sea is a “fractured zone” where for thousands of years migrating peoples and cultures met, struggled for dominance and in the end established overlapping culturally distinct enclaves. In the 19th century borders were arbitrarily established by Great Powers which did not correspond to historic traditions or ethnic unity. Atropia was one such entity. It was an ethnically mixed Autonomous Province of the Donovanian (later Zloi) Empire, strategically located between Slavic Donovia to the north, Minaria on the west and Pharsi Ariana to the south. Both Minaria and Ariana have long standing claims to parts of Atropia. In 1989, when the Zloi state collapsed, Atropia declared its independence, with the Azeri ethnic majority monopolizing power within the new state. Atropia is a politically weak but potentially oil rich country. While there have been some conflicts between the dominant Azeri and minority ethnic groups of Pharsi and Minarians within Atropia these conflicts would have been manageable if it were not for outside support from the countries of Ariana and Minaria. Both Ariana and Minaria have used ethnic tension within Atropia as a tool to further their territorial and economic claims on Atropia. Minaria militarily supported the breakaway province of Arzak, with its ethnic Minarian population, in southwest Atropia. In a similar fashion, Ariana began in 2001 to dramatically increase support for the ethnic Pharsis in the strategic oil rich province of Talysh in the southeastern region of Atropia along the Caspian Sea.

Southeast Atropia is the current area of conflict and the area of operations of US forces. Within this area live three distinct ethnic groups, Pharsi, Azeri and Minarians. The Pharsi were previously the dominant group in Talysh province, with strong religious and cultural ties to Ariana. In the past, Pharsi tribal leaders were the key authority figures in Talysh province. The Pharsi were previously small farmers and herders whose primary loyalty was to their clan and tribe. They lived predominately in the highlands. In the last 50 years many Pharsi immigrated to the lowland cities of Kirovabad, Agdam, and Fuzuli in search of jobs. Since independence in 1989, senior provincial officials have been ethnic Azeris, primarily coming from educated elite

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from Baku. Most local Azeris were formerly lowland farmers inhabiting the countryside, but there has also been a significant migration to the towns in search of jobs. The Minarians in the province live in the cities and are primarily shopkeepers, small industrialists and bankers. The Minarians maintain close ties to their ethnic kinsman in both ARZAK and MINARIA. Minarians make up a major element of the terrorist organizations in the region. The ethnic make-up in the region in 2008, prior to hostilities was approximately 40% Pharsi, 50% Azeri and 10% Minarian. Most of the civilian population, both ethnic Pharsis and Azeris are generally apolitical. While both Pharsis and Azeris tend to be sympathetic to their ethnic brothers, and suspicious of other ethnic groups the majority of the population is primarily concerned with security and the welfare of their families.

Minaria is interested in maintaining a weak Atropia to support the Arzak independence movement; distrusts the U.S. intervention – believes the U.S. has “sided” with Atropia in the regional conflict. Minaria is allied with Ariana against Atropia as a matter of expedience, and is likely to use – and support – terrorist actions to prevent a unified Atropia.

Ariana became an increasingly aggressive regional power since its rebirth as an anti-western Islamic Republic in 1980 and the collapse of the Zloi/Donovian Empire in 1989. Ariana, based on historic claims to region of Talysh province, has contested Atropian control of Caspian Sea oil fields for a number of years. Ariana has sponsored terrorist attacks by Pharsi separatists within Atropia. The Atropian government's forceful response to terrorist attacks and Pharsi separatist activities increased tensions between the two countries. In September 2009, Ariana began to mobilize its reserves and move forces to the border with Atropia. In response to requests from the Government of Atropia, the President of the United States directed establishment of CJTF-Caspian Sea (CJTF-CS), activated reserve and National Guard units, and began troop deployment. The mission given to CJTF-CS was to maintain the territorial integrity of Atropia.

On 28 Mar 2010, Ariana conventional forces attacked across the Atropia border with the stated limited objective securing the return of the disputed province of Talysh. Arianian Forces attacked with 2 Operational Strategic Commands (1 OSC and 2 OSC) abreast to defeat Caspian Federation (CF) forces and seize Atropian oil fields. 3 OSC remained in Ariana as a reserve force. 4 OSC is mobilizing in the vicinity of Teheran and is estimated to take 90 days to reach 70% in personnel, equipment and training readiness.

Arianian ground maneuver was rapid as lead Divisions enjoyed reasonable success during the first 72 hours of the offensive with support from Arianian Air Force and attack helicopters. However, allied fixed wing attack aircraft and Marine attack helicopters were highly successful in attriting Arianian armored formations as they moved against CF forces. Subsequently, the Arianian offensive was halted after 96 hours and transitioned to the defense. Assessments indicate 2 OSC will execute an area defense to preserve forces and to deny 74 ID access to critical terrain throughout the AO. Their intentions are to go to ground close to rural and urban population centers so as to influence Atropian public opinion that their military actions were appropriately taken.

After the Arianian Air Force lost multiple aircraft in air-to-air combat to Combined Joint Forces Air Component Command aircraft, it retired to Southeast Ariana and remained on the ground. Attack helicopters continued to support the ground maneuver but only during daylight hours. Rotary wing aircraft have not operated during the hours of darkness as their pilots lack adequate limited visibility training.

Arianian political leaders are attempting to seek an international settlement through negotiations which would enable them to retain some or all of their military gains. The government of Atropia, strongly supported by the US government, has rejected any discussions

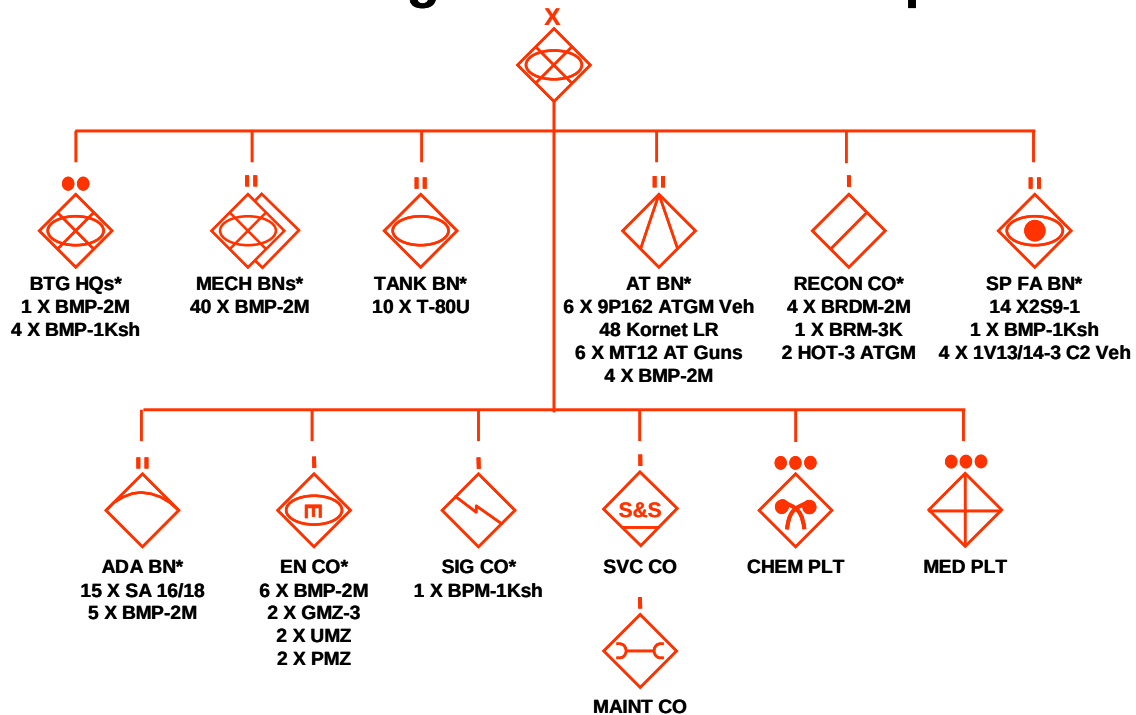
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with Ariana, until Arianian forces have withdrawn to pre-war borders. CJTF-CS has been directed to restore the territorial integrity of Atropia.

(2) Composition. The 247th Brigade Tactical Group (BTG) is a standard IFV-equipped unit. Earlier actions and division and corps deep fires have attrited the BTG to between 60 and 70% strength. Their Mechanized Infantry Battalions (MIB) have suffered significant losses and have reorganized into two MIBs of two companies each. The tank battalion was targeted by division deep fires and is currently assessed to be at company-strength and makes up the BTG Reserve (BTGR). The 24th Division Tactical Group (DTG) has replaced BTG losses in the AT Battalion to improve their tank-killing capability (Kornet-LR AT missiles with a 5,500 meter range) and is expected to place task organized AT batteries with an ATGM platoon and AT gun platoon OPCON to each MIB to support their disruption zones. In addition to the BTG's organic FA Battalion, the OSC Independent Fires Command (IFC) has task organized an artillery group that consists of one 2S1 battalion (60% strength) and one 2S19 battalion (60% strength) and placed them in direct support to the BTG. Additionally, we expect the BTG to place and engineer platoon OPCON to each MIB for countermobility operations. The 247th BTG organization and equipment summary is shown below.

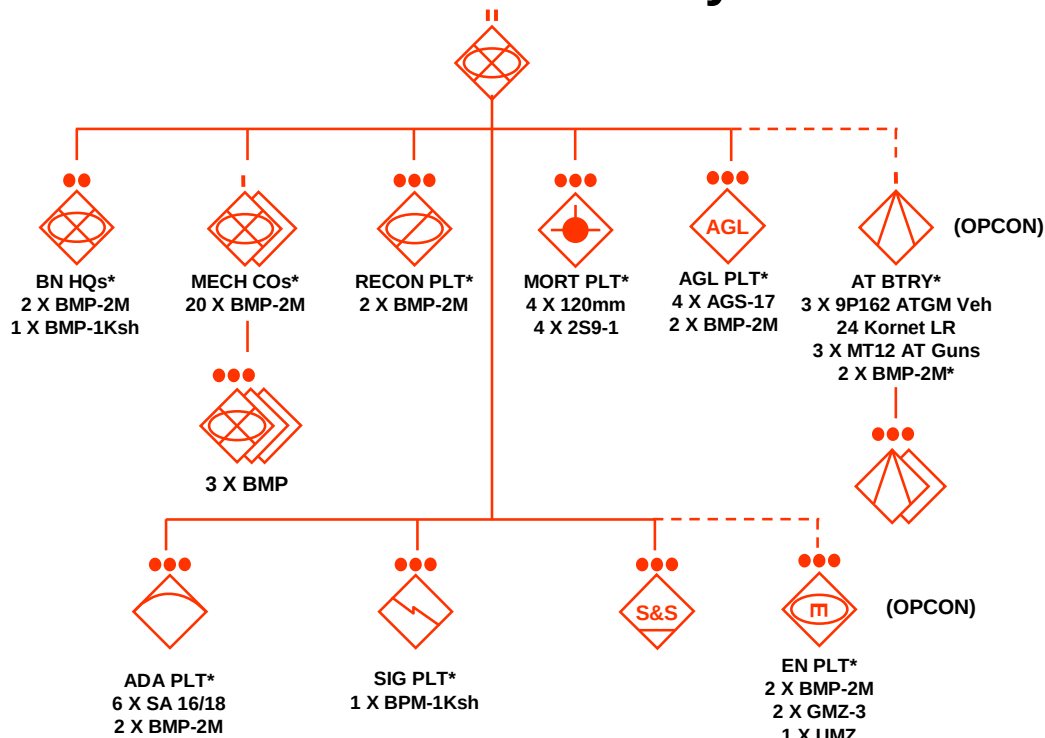
247th Brigade Tactical Group



247th Brigade Tactical Group Equipment Summary at ~60-70% Strength													
C2		Recon		IFV	Tank	AT			FA	ADA	Minelayers		
BMP-1Ksh	IV13/14-3	BRDM-2M	BRM-3K	BMP-2M	T-80U	9P162	MT12	Kornet-LR	2S19	SA 16/18	GMZ-3	UMZ	PMZ
6	4	4	1	56	10	6	6	48	14	15	2	2	2

In the BCT's zone, the 1st MIB defends in the east with two Mechanized Infantry Companies (MIC) at approximately 70% strength. The 1/247th MIB is organized as follows:

1/247th Mechanized Infantry Battalion



1/247th Mechanized Infantry Battalion Equipment Summary at ~60-70% Strength													
C2	Recon			IFV	Tank	AT			MORT	ADA	Minelayers		
BMP-1Ksh	IV13/14-3	BRDM-2M	BRM-3K	BMP-2M	T-80U	9P162	MT12	Kornet-LR	2S9	SA 16/18	GMZ-3	UMZ	PMZ
2	0	0	0	32	0	3	3	24	4	6	2	1	0

(3) Disposition: Within the BCT's area of operation (AO) the 1/247th BTG establishes the BTG disruption zone vicinity PL ATLANTA with elements from the BTG Reconnaissance Company and the MIB Reconnaissance Platoon. The disruption zone will be supported by the AT Battery from the BTG, the IFC and the BTG FA Battalion. The MIB defends with two companies abreast vicinity OBJs LION and TIGER.

(4) Most Probable Course of Action.

(a) Pattern of the Defense. The MIB conducts an integrated area defense with two companies abreast in the main battle zone to defeat the BCT in order to preserve territorial gains and force our attack to culminate before securing key terrain along the International Border (IB). The MIB positions the OPCON AT Battery forward of the main defensive zone to destroy high value targets and disrupt our maneuver.

(b) Observation. The MIB reconnaissance platoon establishes observation posts in sector west of PL ATLANTA to provide early warning for defending forces in the main battle zone. These observation teams coordinate directly with the BTG FA BN and OSC IFC to provide interdiction and disruption fires.

(c) Indirect Fires. The OSC IFC can range attacking forces with RAP HE and DPICM as far west as PL AUSTIN. In coordination with disruption zone observation posts, the

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IFC will most likely attempt to interdict stationary enemy high value assets, massed vehicles, or detected logistical trains. The BTG is not likely to employ artillery delivered situation obstacles or persistent agents in support of the disruption zone units. A mortar battery of 4 - 120mm, self propelled systems positions 1000-1500 meters behind the southern company to suppress our overwatching elements, neutralize dismounted attacks, and provide protective and obscuration fires battle zone MICs.

(d) Direct Fires. The AT Battery places ambush positions on the flanks of the BCT's AO to engage high value targets (C2 nodes, breaching assets) as the CAB's lead companies approach PL ATLANTA to disrupt our maneuver and provide early warning for the MIB's main battle zone MICs. The AT Battery will maintain visual contact with our CABS to call indirect fires to disrupt their maneuver to seize OBJs LION and TIGER. The AT Battery will remain in the disruption zone to destroy our C2 nodes and attack the CABS as they begin their attacks on OBJs LION and TIGER. As the CABS cross PL RUBY, BMPs engage CAB lead company/teams with long-range AT fires and will reposition to blunt our penetration of their defense. As we close within 2000 meters of OBJs LION and TIGER, AT-4s from dismounted infantry positions on the objective will engage support and breach elements as we attack to seize OBJs LION and TIGER.

(e) Obstacles. Engineer priority of support will be countermobility, mobility, and survivability. The BTG employs surface laid track and full width AT and wire fixing obstacles 2-300 meters deep by 200-1000 meters long to enable defending forces to mass direct fires on the BCT. MICs employ 100-200 meter-long wire & mine protective obstacles 2-300 meters forward of fighting positions in support of dismounted infantry to disrupt our assault on OBJs LION and TIGER. Additionally, Arianian forces may employ limited amounts of Area Denial Artillery Munitions (ADAM) and Remote Anti-Armor Mine System for counter-mobility and shaping operations.

(f) Chemical. The BTG has not employed persistent chemicals to date, but may do so to prevent our penetration of their defense. We expect them to employ 1-2 short duration, non-persistent agents in support of their disruption zone units to support their displacement and to disrupt our maneuver and to prevent us from massing direct fires on OBJs LION and TIGER.

(g) Air. Only rotary wing assets will support the area defense. Fixed wing air will be rarely seen, if at all. Currently, all fixed wing aircraft are on the ground and camouflaged near airfields in SE Ariana after significant losses of 23 to 25 aircraft during the first 2 days of conflict. Rotary wing assets can be utilized in close support during the actual conduct of the defense and to protect the defensive flanks and gaps in the area defense. HIND-D, MI-26 (heavy) and MI-8 (medium) lift helicopters will continue to operate in the AO.

(h) Reserve. The BTGR (10 X T-80Us) will be committed to the BCT AO to defeat any penetration of the BTG main defensive zone. We estimate that they will arrive within 30 minutes of commitment.

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b. Friendly forces.

(1) X CORPS.

(a) Mission. X CORPS attacks in zone 100400CAPR2010 to defeat Arianian forces in zone to restore the International Border (IB) to bring stability to the sovereign nation of Atropia.

(b) Intent. The purpose of this operation is to restore and secure the IB. The tempo of the attack must be rapid enough to penetrate his defenses while preventing his ability to conduct counterattack operations.

Key tasks:

- Defeat 2 OSC forces in zone.
- Restore and secure the IB.
- Execute IO in a timely manner to exploit opportunities to destroy the credibility of the insurgents, degrade their recruiting efforts, separate the insurgent from the populace, enhance the positive image of US efforts, return the Atropian Government to operations, and deny the insurgent's ability to influence the people of Atropia.
- Deny the enemy the ability to regroup during the transitions between offensive, defensive, and stability operations.

Endstate: 2 OSC forces in zone defeated, IB restored and forces positioned along the IB to defend against further Arianian offensive action, and forces prepared to conduct security and stability operations to restore and maintain order in Atropia.

(2) 74 ID.

(a) Mission. 74 ID attacks in zone 100400CAPR2010 to seize Objectives CORAL and VIPER in order to restore the IB. O/O conduct defensive operations in sector to maintain the IB.

(b) Intent. The purpose of this operation is to restore the IB. To accomplish this, we will defeat enemy elements in zone, and then maneuver rapidly to seize Objectives CORAL and VIPER.

Key tasks:

- Destroy elements of the 24th and 28th DTG forces in zone.
- Restore and secure the IB.
- Conduct IO to ensure the local populations understand we are acting at the request of Atropian authority, and that we are there to facilitate the return of their country to independent operations.
- Rapid transition between offensive, defensive, and stability operations to deny the enemy the ability to regroup.

Endstate: Enemy forces in zone destroyed, IB restored with BCTs positioned along the IB to defend against Arianian aggression and BCTs prepared to conduct stability and security operations in zone to restore order to Atropia.

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(3) Adjacent Unit Missions.

(a) North. 78 ID attacks in zone 100400APR2010 to destroy enemy forces in zone and seize OBJ HAWK to restore the IB. O/O conducts defensive operations in sector to maintain the IB. Be prepared to (BPT) conduct security and stability operations in sector to secure the IB, and restore and maintain order in Atropia.

(b) West. 2-74 HBCT follows and supports 1-74 HBCT to clear enemy forces in zone. O/O conduct security and stability operations in sector to restore and maintain order. BPT to seize OBJ VIPER. BPT conduct defensive operations in sector to reinforce 1-74 HBCT's effort to secure the IB.

(c) South. 3-74 HBCT attacks along AXIS ELK to destroy Arianian forces and seize OBJ CORAL. O/O conducts defensive operations in sector to maintain the IB. BPT conduct security and stability operations in sector to secure the IB, and restore and maintain order in Atropia.

c. Environment.

(1) Terrain. Terrain favors generally favors the attacker. The compartmentalized terrain, combined with vegetation limit long range observation and fires throughout the zone.

(a) Observation and Fields of Fire.

(1) Relief. The higher elevations offer fair sites for long distance observation overlooking the valleys. Most of these sites are accessible only by foot. Due to forested vegetation along the rivers, observation is poor. Within the valleys, there are areas of grasslands with no significant relief that will provide excellent observation and fields of fire.

(2) Vegetation. Observation and fields of fire are restricted throughout the forested regions. Observation and fields of fire for small arms are good in the open areas, but restricted to less than 100 m in the forested areas. Along the streams and in areas with dense underbrush, line of sight is reduced to less than 25 m.

(b) Avenues of Approach. Three main AAs control movement throughout the AO:

(1) AA #1. All-weather hard surface Route M2 originates at the port of Balami along the Black Sea in the country of Gorgas. Following Route M2 north 40 km to the Port of Poti, Route M2 proceeds East 95 km to the city of Kutaisi (Gorgas) to the junction of Route M1. Then Route M1, an all-weather hard surface road, orients southeast 110 km to the city of Khushuri and continues east for 147 km to the junction of Route M3, 40 km north of the city of Tbilisi (Gorgas). The AA proceeds south to Tbilisi on the all-weather hard surface Route M3. Leaving Tbilisi, the AA follows the all-weather hard surface Route M5 east for approximately 160 km to the Gorgas-Atropia border. There, the all-weather hard surface Route A315 begins orienting southwest 180 km to the Route H27 junction. The all-weather hard surface Route H27 then heads east for approximately 270 km to the city of Baku.

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(2) AA #2. Route M4, an all-weather hard surface road, originates from the city of Tbilisi (Gorgas) and heads southwest for 110 km, paralleling the Kur River, to the city of Qazax (Atropia). The AA then proceeds along Route H27 southwest for 120 km to the city of Ganca. Leaving Ganca, the AA heads east for 70 km to the junction of Route A324, an all-weather fair surface road. It then proceeds southwest for 260 km to the junction of Route A322, an all-weather hard surface road. Leaving this junction, the AA continues on Route A322 for approximately 72 km to the city of Baku.

(3) AA #3. This AA originates with the all-weather hard surface Route H27 at the city of Ganca. It proceeds east for 51 km to the junction of Route A316, an all-weather fair surface road. The AA continues on Route A316 for approximately 220 km southwest to the city of Bilasuvar. It leaves the city of Bilasuvar north along Route A322, an all-weather hard surface road, for 150 km to the city of Baku.

(c) Key Terrain. The city of Agdam is considered key terrain because it controls north to south movement along Route A317 within the area of operations.

(d) Obstacles.

(1) Relief. Atropia's relief with its high mountains, volcanic highlands, and deep canyons severely restricts movement. Mountain ranges in the Corps AO become effective barriers and limit movement across and through them. Steep slopes will force wheeled and tracked vehicles to use the surrounding mountain valleys and plains, canalizing them. Steep and high wadi banks present a barrier to vehicle movement. Wadis may be linked with obstacles to create a large linear obstacle, especially in the southern coastal region and in the plateau region adjacent to the mountains. The vast low plain, the Kura or Kura-Araks Lowland, generally does not obstruct off-road movement, except in isolated areas of localized relief.

(2) Vegetation. Cross-country movement for foot troops and vehicles is restricted to very restricted within the forested areas. The dense vegetation and underbrush along the stream banks severely hinder all movement within these areas.

(3) Drainage. The Kur River and Araks River are major obstacles to north/south movement. Dense vegetation, along with the varying depths of the rivers, restricts crossings to existing crossing or fording sites. Numerous canals within the area of operation restrict movement. Bridging assets will be required to cross areas of the Kura and Araks Rivers that are not fordable. Additionally, throughout the AO, the primary surface drainage feature is intermittent streams known as wadis. In the mountains, wadis are usually less than 50 meters wide, "v" or flat-bottomed, with steep banks. Whether wet or dry, engineer assets may be required to cross.

(4) Surface Materials. Mudflows and landslides are also widespread, restricting movement in higher elevations. Poorly drained soils near canals also restrict movement.

(5) Man-Made Features. Numerous built-up areas restrict movement for foot troops and vehicles. There are numerous cities, towns, and villages with a population less than 100,000. Most city centers in the Corps AO consist of old masonry (brick, adobe, or stone) structures and dwellings, usually within a masonry or stone walled compound. Street patterns

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in these areas are irregular and narrow in nature; therefore, cities are a severely restricted obstacle to mechanized forces.

(e) Cover and Concealment.

(1) Relief. There are areas in the high plains where the slopes will offer fair cover from the flat trajectory fire of small arms. Specifically, in the larger valley floors in the mountains and plateau regions, wadis are present which are 150 to 500 meters wide, with some larger dry riverbeds up to 1000 meters wide. These may have banks with greater than 60 percent slope, and range in height from three to seven meters. The wadis and small escarpments will provide fair to excellent protection from flat trajectory weapons and ground detection to dismounted troops. The lower plains offer poor cover from flat trajectory fire of small arms.

(2) Vegetation. Coniferous forests have 50-100 percent canopy closure year round, and they provide good concealment from aerial observation for foot troops. Forested areas offer fair to good concealment from ground observation for foot troops and vehicles. The areas with dense underbrush provide excellent concealment from ground observation for foot troops and vehicles. Dense vegetation along the riverbanks provides excellent concealment from ground and aerial observation for foot troops and vehicles. Cover from flat trajectory small arms fire is fair to good in dense forests. Cover in these areas decreases as the tree spacing increases.

(3) Man-Made Features. The numerous built-up areas provide good concealment and cover within the buildings for foot troops and vehicles. Isolated training, industrial, and transportation areas provide poor to fair concealment and cover for foot troops and vehicles.

(2) Weather. TBP.

(3) Civil considerations. There are approximately 350,000 dislocated persons in the 1-74 HBCT sector. Most are from the southern region of Atropia. Expect numerous and frequent contact with displaced personnel throughout the sector. Expect shortages of water, food, shelter, and fuel for these displaced civilians. UN High Commission for Refugees (UNHCR) is the principle international agency responsible for displaced civilians. Significant damage to key civilian infrastructure throughout zone can be expected. It is possible that some areas are without some or all of the following: power/electrical systems; water system; communication networks; transportation networks; medical supplies, facilities, and hospitals. The Atropian economy has faltered as a result of hostilities. Most Atropian citizens are now unemployed.

d. **Attachments and Detachments.** See ANNEX A (Task Organization).

2. MISSION. 1-74 HBCT (DIV ME) attacks 100400CAPR2010 along AXIS PORSCHE and CORVETTE to destroy enemy forces in zone, seize objectives LION and TIGER and restore the IB. O/O conduct defensive operations in sector to secure the IB.

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3. EXECUTION.

Intent: The purpose of this operation is to restore the IB. To accomplish this, we will destroy enemy elements in zone and seize OBJs LION and TIGER to prevent further Arianian offensive actions in Atropia.

Key tasks:

- Destroy enemy elements in zone.
- Reestablish and secure the IB in sector.
- Conduct IO to ensure the local populations understand we are acting at the request of Atropian authority, and that we are there to facilitate the return of their country to independent operations.
- Conduct rapid transitions between offensive, defensive, and stability operations.

Endstate: At the conclusion of offensive operations, 1-74 HBCT will destroyed enemy forces in zone, established hasty defensive positions on OBJs LION and TIGER and prepared to conduct security and stability operations in sector to restore order in Atropia.

a. Concept of Operations. We will attack on two axis of advance with two CABs abreast to seize OBJs LION and TIGER. 4-49 CAV (Supporting Effort [SE], Shaping Operation [SO]) conducts a zone reconnaissance in front of the BCT's attack to locate the enemy, and transfers the fight of platoon or larger element to the CABs to complete destruction of enemy forces in each CAB's AO. 3-77 IN (SE, SO) attacks to seize OBJ TIGER, establishes a hasty defense to defeat the BTGR and restore the IB. 4-99 AR (Main Effort, Decisive Operation) attacks to seize OBJ LION, to complete destruction of the 1/247th MIB and establishes a hasty defense to restore the IB. 4-49 CAV shifts to screening the BCT's northern and southern flanks during the attack to seize the OBJs LION and TIGER, and then shifts to screening the IB once both objectives have been seized.

(1) Maneuver. 4-49 CAV conducts zone reconnaissance 090200CAPR2010 to PL RUBY to defeat enemy reconnaissance in zone and determine the disposition of the enemy's main defenses. 4-99 AR and 3-77 IN attack on AXIS PORSCHE and CORVETTE 100400CAPR2010 to destroy enemy forces in zone, and seize OBJs LION and TIGER. 4-49 CAV continues conducting zone reconnaissance in front of the brigade's attack from PL JADE to PL RUBY. 4-49 CAV will transfer the fight with platoon size and larger elements to the CABs along their axes of advance. At PL Ruby 4-49 CAV shifts to screening the brigade's flanks on the axis of advance. 3-77 IN attacks to seize OBJ TIGER followed by 4-99 AR's attack to seize OBJ LION. 3-77 IN's penetration of the MIB defense will trigger the commitment of the BTGR in their zone. 3-77 IN defeats the BTGR with a combination of direct fires and BCT indirect fires and CAS to allow 4-99 AR to attack to seize OBJ LION and complete destruction of the MIB. Once OBJs LION and TIGER are secure, BCT establishes a hasty defense to prevent further Arianian offensive action across the border.

(2) Fires. See Annex D (TBP).

(a) Priorities of Fires: 4-49 CAV, 4-99 AR, 3-77 IN.

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(b) Close Air Support. 10 Sorties Daily (2 remain 1-74 HBCT control). Allocation is 4-99 AR – 4; 3-77 IN – 2, 4-49 CAV – 2.

(3) Intelligence, Surveillance and Reconnaissance (ISR). See Annex L.

(4) Intelligence. See Annex B (TBP).

(5) Engineer. See Annex F (TBP).

(a) Concept of engineer support. 4-49 CAV locates obstacles and obstacle bypasses in zone. 4-49 CAV identifies locations where obstacles must be breached to facilitate maneuver for CABs, and turns responsibility for those breaches over to the following CABs. Priority of effort for engineer assets is mobility through zone.

(b) Priority of support. PL JADE to PL RUBY: 4-49 CAV, 4-99 AR, and 3-77 IN. PL RUBY to OBJs LION and TIGER: 4-99 AR, 3-77 IN, and 4-49 CAV.

(6) Air and Missile Defense (AMD) See Annex G (TBP). The Air and Missile Defense Coordination Cell will provide digital and voice Early Warning. 1-74 HBCT will employ passive defense measures, camouflage and dispersion to enhance threat avoidance. As necessary, 1-74 HBCT will employ final protective fires to defend against aerial attack.

(7) Information Operations (IO). See Annex P (TBP).

(a) IO sets conditions for the enemy's loss of intelligence and C2 to ensure the quick defeat of the Arianian forces. IO influences the civil population to remain in place so as not to interfere with U.S. military operations. Key themes will be the superiority of US/CJFLCC forces and stay put policy for the civil populace. PSYOP assists in the rear area protection by encouraging by-passed enemy units to surrender.

(b) 74 ID IO campaign will focus on five tasks:

Task 1: Deceiving the enemy as to the intent and location of friendly forces main effort, specifically the objectives of friendly forces.

Task 2: Disrupt C2 of SA and insurgent forces. Exploiting the gaps in command and control and SA to create doubts within the insurgent leadership. Support joint suppression of enemy air defense with electronic warfare. Conducting electronic warfare attacks to disrupt the 24th DTG's IFC and command and control assets in the AO.

Task 3: Support 74 ID efforts by emphasizing their legitimacy and encourage the population to 'stay put' throughout combat operations until the Government of Atropia re-establishes control.

Task 4: Protect 1-74 HBCT and 74 ID information systems.

Task 5: Attack enemy morale; disrupt/confuse enemy ground forces in contact.

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(8) CBRN Operations. See Annex J (TBP). 1-74 ID conducts CBRN operations IAW the principles of contamination avoidance, protection, and decontamination in that order. The 459th Chemical Company will provide CBRN reconnaissance; smoke generation and decontamination capability in 74 ID AO to ensure sustainment of forward elements in the close fight and also those in the rear area. The X CORPS Chemical battalion will provide 74 ID chemical assets to reinforce the 74 ID CBRN reconnaissance, smoke generation and decontamination capability.

(9) Military Police. See Annex K (TBP). 1-74 HBCT Military Police unit conducts combat support operations to include area security, maneuver and mobility support, force protection, enemy prisoners of war (EPW) Internment and resettlement operations, Law and Order, and Police Intelligence Operations.

(10) Civil Military Operations. (TBP)

b. Tasks to maneuver units.

(1) 4-49th CAV.

(a) Conduct zone reconnaissance 092130CAPR2010 to PL RUBY to defeat enemy reconnaissance in zone and determine the disposition of the enemy's main defenses.

(b) Conduct zone reconnaissance in front of the brigade's attack from PL JADE to PL RUBY.

(c) Screen the brigade's flanks forward of PL RUBY.

(d) O/O screen the IB.

(2) 3-77 IN.

(a) Attack 100400CAPR2010 on AXIS CORVETTE to destroy enemy forces in zone and seize OBJ TIGER.

(b) O/O conduct defensive operations in sector to maintain the IB.

(c) Be prepared to (BPT) conduct security and stability operations in sector to secure the IB, and restore and maintain order in Atropia.

(3) 4-99 AR.

(a) Attack 100400CAPR2010 on AXIS PORSCHE to destroy enemy forces in zone and seize OBJ LION.

(b) O/O conduct defensive operations in sector to secure the IB.

(c) BPT conduct security and stability operations in sector to secure the IB, and restore and maintain order in Atropia.

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c. Tasks to Support Units.

- (1) 1-391 FA.
 - (a) Q36- #1: OPCON to 4-49 CAV for movement, #2: OPCON to 4-99 AR for movement.
 - (b) Initially follow 4-99 AR along axis Porsche.
- (2) 290 SB.
 - (a) Establish BSA vicinity PK611836, O/O, relocate BSA to vicinity PK700740, then QK386097.
 - (b) BPT to establish an EPW/civilian internee collection point in BSA.
 - (c) Provide assistance securing and maintaining MSR YELLOW throughout the 1-74 HBCT AO.
- (3) 1-74 BSTB.
 - (a) A CO (MI). Focus efforts initially on observing NAIs 65, 75, 80, 90, 100, 110, 120, and 130.
 - (b) B CO (SIG). See Annex H (TBP).
- (4) A/122 MP CO.
 - (a) Conduct route reconnaissance of MSR ORANGE and YELLOW behind the CABS' attack. Establish checkpoints and conduct surveillance of the MSR to keep it clear from hostile activity and refugees.
 - (b) O/O conduct security and counter-reconnaissance operations within the brigades rear area.

d. Coordinating instructions.

- (1) Commander's critical information requirements (CCIR).
- (a) Priority intelligence requirements (PIR).
 - (1) What will be the size, composition, and locations (s) of the BTG and 1/247 MIB reconnaissance forces?
 - (2) What is the location and disposition of the AT Battery in the BCT's AO?
 - (3) What is the disposition and location of the BTGR?
 - (4) What will be the size, composition, and main effort of the 247th BTG forces in the BCT's AO?
 - (5) Indications of movement of chemical munitions moving forward to firing units that can affect 1-74 HBCT.

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- (b) Friendly force information requirements (FFIR).
 - (1) Loss of UAS.
 - (2) Loss of RETRANS Capability.
 - (3) Loss of Critical C4ISR nodes (TOC, TAC, SIG CO).
 - (4) Loss of FA BN assets.
 - (5) U.S. Forces violate ROE or Local Laws.
- (2) Risk Reduction Control Measures. (TBP)
- (3) Mission-oriented protective posture 0 effective at LD.
- (4) White light required at night on MSRs.
- (5) Vehicles will be marked with IAW HBCT TACSOP.
- (6) No vehicles will travel with less than 3 vehicles per convoy.
- (7) Rules of Engagement (ROE). Refer to Annex E (Rules of Engagement).
- (8) Environmental Considerations. Refer to Annex F (Engineer).
- (9) Bypass and report refugee locations through zone.
- (10) All units must be prepared to conduct riot control.
- (11) OPORD 2010-14 TROJAN HORSE is effective upon receipt of mission.
- (12) The current Forward Line of Troops (FLOT) is along PL JADE.
- (13) Initial Operational Timeline.

021600 APR	DIV OPORD
022000	WARNO #1
030800	WARNO #2
040800	WARNO #3
041600	BCT OPORD
051600	CAB R&S Plans To BCT
061600	BCT Rehearsal
080800	TF Rehearsals
090600	BCT INTSUM
090200	Recon Sqdn LD
091800	BCT INTSUM
092100	CAB Scout Platoons LD
100200	Recon Sqdn and CAB Scout platoon conducts RHO in zone
100400	CABs LD

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4. SUSTAINMENT. See Annex I (TBP).

a. Support concept. 290 SB provides DS/GS to 1-74 HBCT units. 74 ID is responsible for maintaining secure line of communications between the 74 ID Support Area and BSAs. 74 ID controls both MSRs ORANGE and YELLOW. Regionally available commercial support will be optimized. The Sustainment Brigade will maximize use of aviation assets to conduct aerial re-supply early on. 21st TSC provides contractor support through deployed contracting teams down to BCT level.

b. Material and services.

(1) 74 ID Sustainment Brigade, augmented by the 74th CSSB, AMC Logistics Support Element, contractors and civilian personnel provides support to 1-74 HBCT from the BSA. 1-74 ID initial support priority and replacement priority is to 4-99 AR, 3-77 IN, 4-49 CAV, 1-391 FA, 290 SB, and A/122 MP Co.

(2) Ground maintenance and evacuation priorities are SENTINEL radar, Artillery Q36/37 Radars, M270 (MLRS), M1, M2, M3, M109 and M9.

(3) 1-74 HBCT main supply routes (MSRs) are ORANGE and YELLOW.

(4) Priority of forward movement is to combat units moving to TAAs, classes V and III (B), replacements and supply vehicles. Priority for rearward movement is to medical evacuation.

c. Health service support.

(1) The X CORPS Medical Brigade (-) provides flexible, responsive and far-forward combat health support (CHS) to units assigned.

(2) 74 ID evacuation policy is 3 days in the DSA, and 48 hours at medical companies supporting brigade-size elements.

(3) Limited hospitalization is available through the host nation.

d. Personnel support.

(1) Units submit operational immediate requests when battalion-sized units or larger fall below 75% of authorized strength.

(2) Postal, personnel finance and administrative services provided on an area basis.

5. COMMAND AND CONTROL.

a. Command.

(1) Location of the commander. BCT Commander will co-locate with 4-99 AR Command Group.

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(2) Succession of Command: Cdrs 4-99 AR, 3-77 IN, 4-49 CAV.

(3) Special instructions for deputy commanders. TBP

b. Control.

(1) Scheme of CP employment. 1-74 HBCT CP is at PK707743 initially, O/O relocates to QK497127.

(2) Special instructions for CPs. TBP

(3) Liaison requirements. TBP

c. C4 Operations.

(1) Network operations. TBP

(2) Signal Operating Instructions.

(a) SOI 23-1, Edition B, is effective upon receipt of this OPORD.

(b) All nets are installed frequency-hop secure using GPS ZULU time.

(c) FM key changeover will occur every 30 days at 1600 local and challenge/reply and SC Frequency changeover will occur daily at 1600 local.

(d) CASEVAC Frequencies are SC 35.25 and 32.50; combat net radio interface (CNRI) is frequency-hop 790.

(3) Information management procedures. TBP

Acknowledge.

PILE

COL

Official

Jones
S3

ANNEXES:

Annex A (Task Organization)

Annex C (Operations Sketch)

Annex L (Intelligence, Surveillance and Reconnaissance)

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ANNEX A (Task Organization) to WARNO #2 to OPORD 2010-14

1-74 HBCT

4th Squadron 49th Cavalry

HHT/4-49 CAV
A/4-49 CAV
B/4-49 CAV
C/4-49 CAV
D/290 SB (FSC) (OPCON)

3-77 IN Combined Arms Battalion

HHC/3-77 IN
A/3-77 IN (IN)
B/3-77 IN (IN)
C/3-77 IN (AR)
D/3-77 IN (AR)
1/C/ STB/1-74 HBCT (EN)
E/290 SB (FSC) (OPCON)

4-99 AR Combined Arms Battalion

A/4/99 AR (MECH)
B/4/99 AR (MECH)
C/4/99 AR (TANK)
D/4/99 AR (TANK)
2/C/ STB/1-74 HBCT (EN)
F/290 SB (FSC) (OPCON)

1-391 Field Artillery

HHB/1-391 FA
A Btry/1-391 FA
B Btry/1-391 FA
G/290 SB (FSC) (OPCON)

290 Support Battalion

HHC/290 SB
A/290 SB (Distro)
B/290 SB (Maint)
C/290 SB (Med)

Special Troops Battalion 1-74 HBCT

HHC BDE
HHC BSTB
A/STB/1-74 HBCT (MI)
B/STB/1-74 HBCT (SIG)
C/STB/1-74 HBCT (EN) (-)
A/122 MP (OPCON)

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ANNEX A (Task Organization) to WARNO #2 to OPORD 2010-14

290th Support Battalion

HHC

A/290 DIST Co

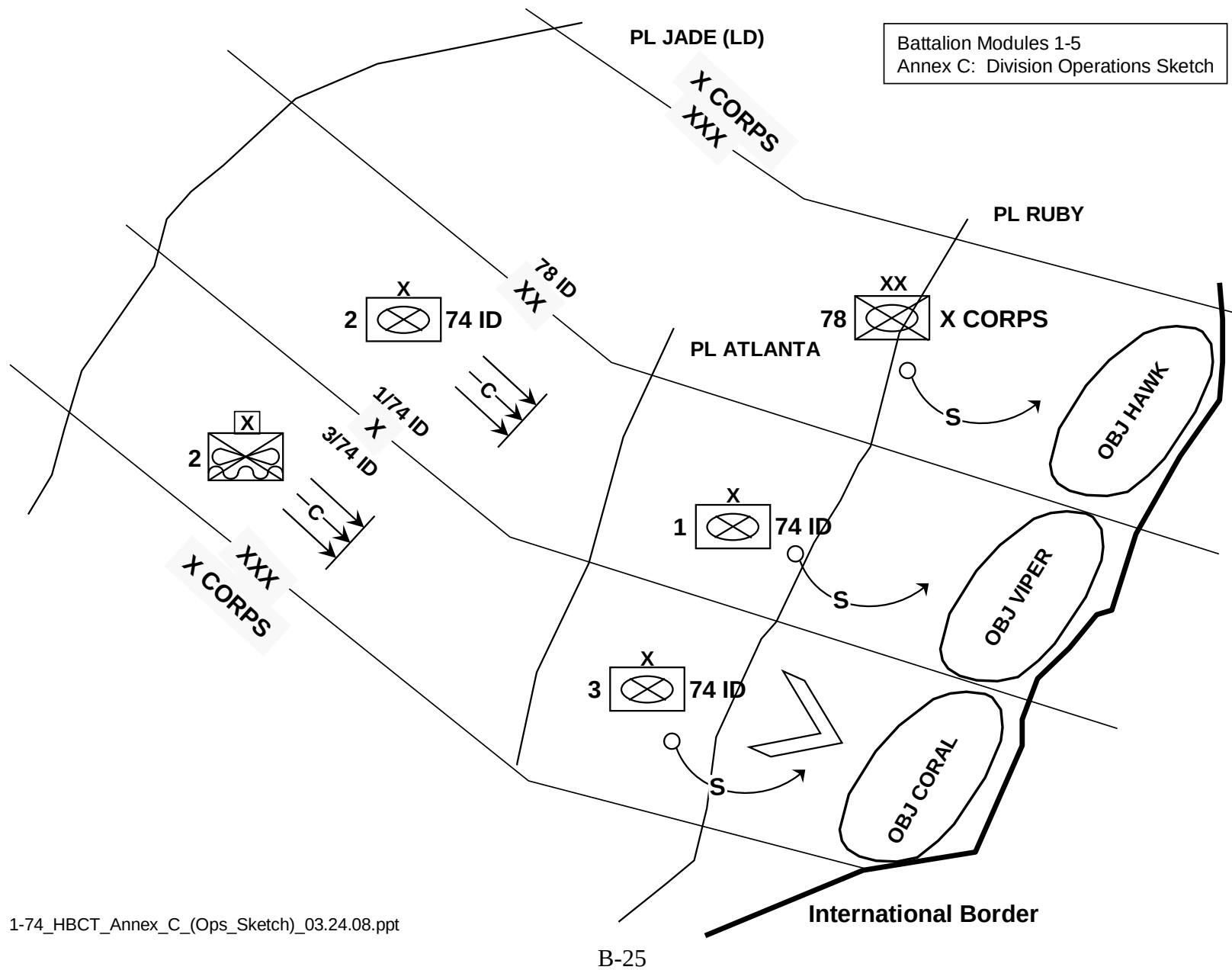
A/741 FSC

B/503 MAINT Co

C/742 MED Co

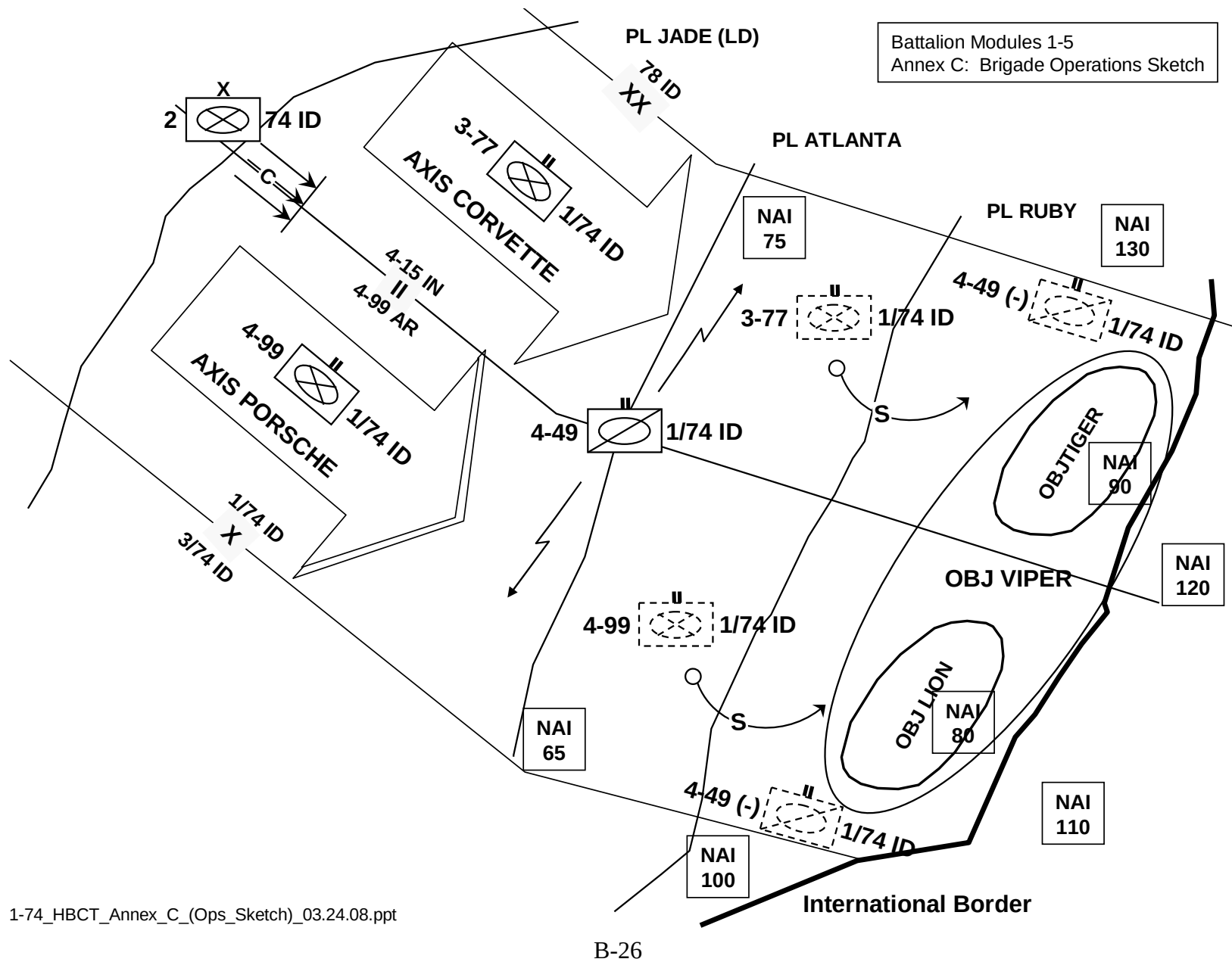
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ANNEX C (Task Organization) to WARNO #2 to OPORD 2010-14



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ANNEX C (Task Organization) to WARNO #2 to OPORD 2010-14



Reference: OPORD: 2010-04 OPERATION IRON HORSE FURY 74 ID

Time Zone Used Throughout Order: Charlie

Task Organization. See WARNO #2 to OPORD 2010-14.

1. SITUATION.

a. Enemy. See WARNO #2 to OPORD 2010-14.

b. Friendly.

(1) X CORPS LRSU. The 10 BfSB has 18 LRS teams, of which 10 have been tasked to conduct surveillance of NAIs in the X CORPS Collection plan. X CORPS assets will focus on 3 OSC and units of the 1 OSC that can influence the fight in the 74 ID AO.

(2) National and CJFLCC assets will focus on mobilization of the 4 OSC and provide early warning should Arianian fixed wing assets deploy into Atropia again.

(3) 74 ID ISR assets conduct intelligence collection on the 24th DTG units from PL JADE to the IB. X CORPS and CJFLCC assets will support initial intelligence-gathering operations beyond IB to the Caspian Sea.

2. MISSION. The 1-74 BCT conducts zone reconnaissance 090200CAPR2010 between PL JADE and the IB to determine the location and disposition of 247th BTG to allow the CABs to rapidly destroy the 1/247th BTG and restore the IB.

3. EXECUTION.

Commander's Intent for ISR: Focus for this operation is on the location and disposition of the AT Battery and BTG Reconnaissance units in the disruption zone, MICs and obstacles in the main battle zone, followed by the BTG Reserve in that order. The overall tempo of reconnaissance is deliberate, the engagement criteria is discrete.

a. Concept of ISR Operations. BCT reconnaissance operations will be centered on information to allow the BCT to maintain the tempo of the attack. Initial focus will be on the identification and defeat of the BTG AT Battery and Reconnaissance units in the disruption zone by 4-49 CAV and BCT fires to allow the CABs to rapidly attack through zone. 4-49 CAV conducts reconnaissance handover at PL RUBY to CAB scout platoons to identify MIC location and disposition on OBJs LION and TIGER. BCT then focuses on identification and targeting of the BTG Reserve to prevent it from disrupting the CAB's attack on OBJs LION and TIGER.

b. Scheme of Reconnaissance. At 090200CAPR2010 4-49 CAV conducts zone reconnaissance between PL JADE and PL RUBY to identify and defeat 1/247 BTG disruption zone units. Focus will be on confirming 1/247 BTG AT Battery locations templated at NAIs 65 and 75. The BCT will target confirmed AT ambush positions with fires. At PL RUBY 4-49 CAV observes NAIs 80 and 90 to confirm MIC location and disposition on OBJs LION and TIGER. CAB scout platoons LD 092100 and conduct reconnaissance handover (RHO) of NAIs 80 and 90 with 4-49 CAV at PL RUBY. CAB scout platoons begin observing NAIs 80 and 90 on OBJs LION and TIGER to confirm MIC and obstacle locations on OBJs and points of penetration in

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Annex L (Intelligence, Surveillance and Reconnaissance) to WARNO #2 to OPORD 2010-14

the MIB defense. 4-49 CAV screens the BCT's flanks forward of PL RUBY and observes NAIs 100 and 130 to provide early warning to the CABs as they attack to seize OBJs LION and TIGER. Once OBJs LION and TIGER are secure, screen the IB and observe NAIs 110 and 120 to identify the BTGR.

c. Tasks to maneuver units.

(1) 4-49th CAV.

(a) Conduct zone reconnaissance 090200CAPR2010 to PL RUBY to defeat 1/247th BTG AT and reconnaissance units in zone and conduct surveillance of NAIs 65 and 75.

(b) At PL RUBY, conduct surveillance NAIs 81-83 and 91-93 to determine the disposition of the enemy's main defenses.

(c) Conduct RHO of NAIs 80 and 90 with CAB scout platoons at PL RUBY.

(d) Screen the BCT's northern and southern flanks forward of PL RUBY and conduct surveillance of NAIs 100 and 130 to detect commitment of the BTGR and provide early warning to the CABs as they attack to seize OBJs LION and TIGER.

(e) Once OBJs LION and TIGER are secure, screen the IB and conduct surveillance NAIs 110 and 120 to detect commitment of the BTGR.

(2) 3-77 IN.

(a) Conduct zone reconnaissance 092100CAPR2010.

(b) Conduct RHO at PL RUBY and conduct area reconnaissance of NAI 90 to confirm MIC and obstacle locations on OBJ TIGER.

(3) 4-99 AR.

(a) Conduct zone reconnaissance 092100CAPR2010.

(b) Conduct RHO at PL RUBY and conduct area reconnaissance of NAI 80 to confirm MIC and obstacle locations on OBJ TIGER.

d. Coordinating Instructions. See WARNO #2. Subordinate units develop detailed ISR plans that include coverage of assigned NAIs and nominations for CAB NAIs and submit supporting plans to the BCT S-3 NLT 051600CAPR2010.

4. SUSTAINMENT. See Annex I TBP.

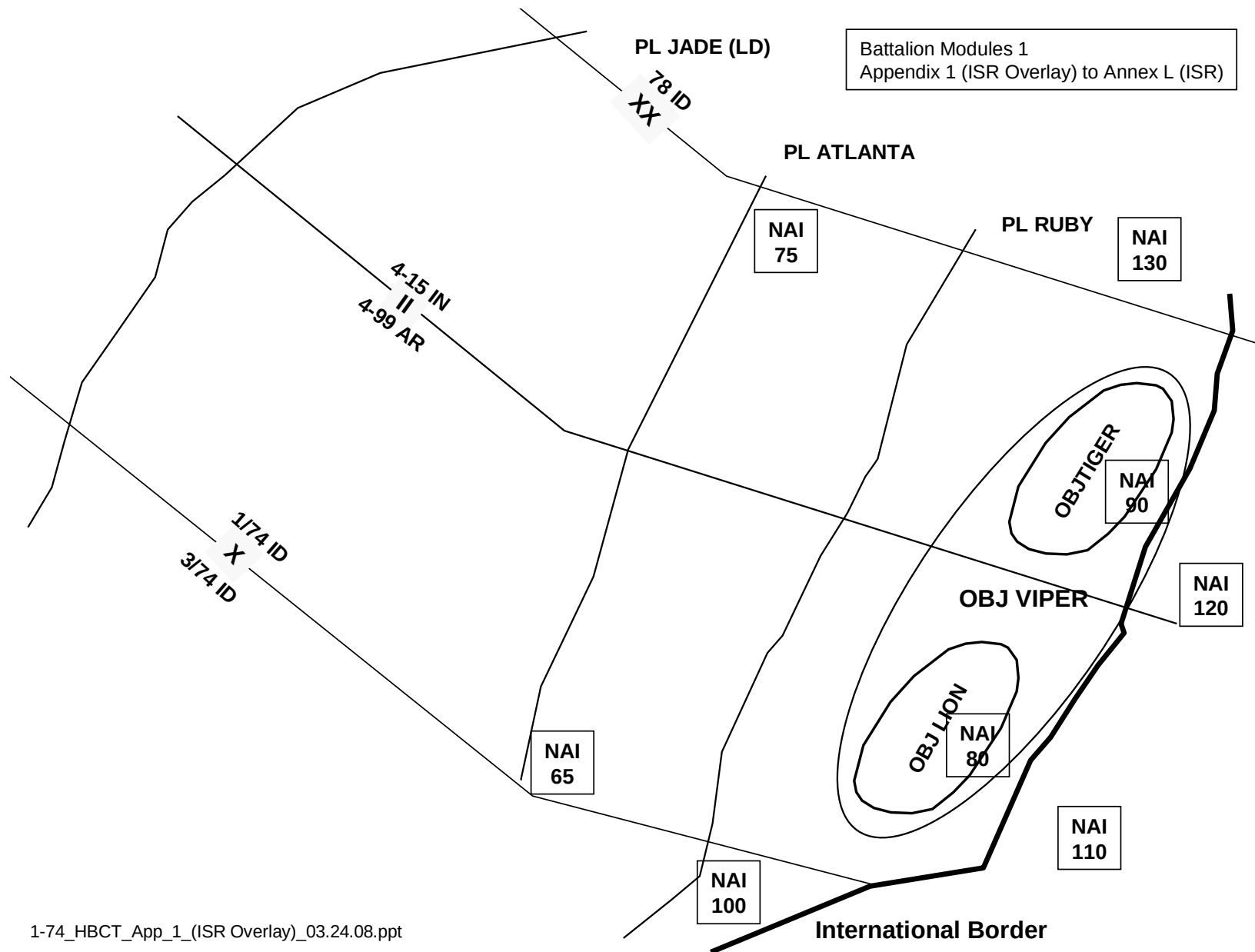
5. COMMAND AND CONTROL. See base OPORD TBP.

APPENDIXES:

1 – ISR Overlay

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Annex L (Intelligence, Surveillance and Reconnaissance) to WARNO #2 to OPORD 2010-14



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Assessment Category: Technical-administrative Behaviors

Module #02: Understanding All Available Assets

Scenario: You are the Assistant S3 (A/S3) of 4-99 AR. You have received 1-74 HBCT [WARNO #2](#) and are in MDMP Step 2 (Mission Analysis). The CAB has received an attached engineer platoon and the FSC OPCON to the CAB. The S-3 has asked you to identify any additional assets in the HBCT that the CAB may need for the upcoming operation. You know that the Brigade's Special Troops Battalion (BSTB) contains an HHC, an MI Company, a Network Signal Company, and a Combat Engineer Company.

Questions:

A-1: (Recall) What assets does the BSTB HHC have that can be task organized to the CAB? (Circle the BEST answer.)

- a. MP Platoon.
- b. CBRN Decontamination Platoon.
- c. CBRN Multipurpose Smoke Platoon.
- d. BCT Reconnaissance Platoon.

A-2: (Recall) What assets does the BSTB MI Company have that can be task organized to the CAB? (Circle ALL that apply.)

- a. A Target Development Team from the Analysis and Integration Platoon.
- b. The ISR Requirements Section from the Analysis and Integration Platoon.
- c. A Prophet Collection Team from the Multisensor Ground Platoon.
- d. A Measurement and Signatures Intelligence (MASINT) Section from the Multisensor Ground Platoon.
- e. Unmanned Aerial Systems (UAS) from the UAS Platoon.

Scenario continued: Based on your initial analysis, you believe the CAB will need an MP Platoon, a Prophet Collection Team, and UAS support.

A-3: (Recall) You know that the BCT has two Prophet Collection Teams. Which statement below best describes their use? (Circle the BEST answer.)

- a. The Prophet is a mobile, ground-based MASINT system that provides a ground sensor capability to detect vehicles on the battlefield.
- b. The Prophet is an unattended ground sensor system that detects, classifies, and determines direction of movement of intruding personnel and vehicles. It detects moving targets and classifies them as personnel, wheeled vehicles, or tracked vehicles.
- c. The Prophet is a mobile, ground-based electronic warfare attack system that provides electronic jamming of combat net radio frequencies in the 20-2,000 MHz range.
- d. The Prophet is a mobile, air-based tactical SIGINT system that provides signal intercept and direction finding capabilities to provide early warning.
- e. The Prophet is a mobile, ground-based tactical SIGINT system that provides signal intercept and direction finding capabilities to provide early warning.

A-4: (Recall) You know that the BCT has UAS capabilities at both the CAB and HBCT-levels. What statements below best describe the UAS capabilities within the HBCT? (Circle ALL that apply.)

- a. Each company in the CAB has an RQ-11 Raven UAS.
- b. The BCT UAS Platoon has four RQ-7 Shadow UAS.
- c. Each company in the CAB has an RQ-7 Shadow UAS.
- d. The BCT UAS Platoon has four RQ-11 Raven UAS.
- e. Raven missions typically occur at 100-300 feet altitude, while Shadow missions typically occur at 6-8,000 feet.
- f. Shadow missions typically occur at 100-300 feet altitude, while Raven missions typically occur at 6-8,000 feet.
- g. Shadow range is 8-12 km, while the Raven is up to 125 km.
- h. Raven range is 8-12 km, while the Shadow is up to 125 km.
- i. Both the Raven and Shadow have a day/night detection capability.
- j. Raven mission time is 5 hours and Shadow is 1-1.5 hours.
- k. Shadow mission time is 5 hours and Raven is 1-1.5 hours.

ANSWER KEY

Module #02: Understanding All Available Assets

Question	Answer	Doctrinal Reference/Rationale
A-1	a	FM 3-90.61, Figure 2-3 shows the HHC, BSTB organization.
A-2	c e	FM 3-90.5, para 4-3 states that, "The CAB commander may have access to ISR assets from BCT and higher, including UAS, combat observation and lasing team (COLT) teams from the fires battalion, recon troops, and possibly Army aviation. The CAB commander also may receive support from or provide support to human intelligence (HUMINT) or signals intelligence (SIGINT). The BCT has both SIGINT and HUMINT capability in its military intelligence (MI) company."
A-3	e	FM 3-90.61, para 2-40 states that, "The AN/MLQ-40(V)3 system is a mobile ground-based tactical signal intelligence (SIGINT) system. The system's electronic support (ES) and ground surveillance capabilities provide a picture of the battlefield and early warning of potential threats to supported forces. It performs signal intercept and direction finding (DF) in the 20-2,000 MHz frequency range providing signal characteristics and line of bearing (LOB) data on signals of interest."
A-4	a b e h i k	a. Each company in the CAB has an RQ-11 Raven UAS. (FM 3-90.5, para 4-64) b. The BCT UAS Platoon has four RQ-7 Shadow UAS. (FM 3-90.6, para A-10) e. Raven missions typically occur at 100-300 feet altitude, while Shadow missions typically occur at 6-8,000 feet. (FMI 3-04.155, para 2-36 and Table 2-7, respectively) h. Raven range is 8-12 km, while the Shadow is up to 125 km. i. Both the Raven and Shadow have a day/night detection capability. k. Shadow mission time is 5 hours and Raven is 1-1.5 hours.

Assessment Category: Technical-administrative Behaviors

Module #03: Developing a Mission Statement

Scenario: You are the Assistant S-3 (A/S-3) of 4-99 AR. You have just received 1-74 HBCT [WARNO #2](#) and are analyzing it to develop a proposed mission statement for the battalion.

Questions:

B-1: (Understanding) You begin by identifying specified, implied, and essential tasks as well as facts, assumptions, and constraints. Listed below are some statements from the WARNO. Identify the specified, implied, and essential tasks, as well as facts, assumptions, and constraints from the list of statements below. (Label each statement with the appropriate letter: S=Specified, I=Implied, E=Essential, F=Fact, A = Assumption, C= Constraint.)

_____ a. The southeastern region of Atropia contains three distinct ethnic groups: Pharsi (40%), Azeri (50%), and Minarian (10%).

_____ b. The 247th BTG has placed a task organized AT Battery OPCON to each of the two remaining MIBs in the BTG.

_____ c. The BTG Reserve is composed of a T-80U tank company.

_____ d. The 1/247th BTG establishes the BTG disruption zone vicinity PL ATLANTA with an AT Battery, the MIB reconnaissance platoon, and elements from the BTG reconnaissance company supported by the Operational Strategic Command (OSC) Independent Fires Command (IFC) and BTG FA battalion.

_____ e. 2-74 HBCT follows and supports 1-74 HBCT in zone to destroy bypassed Arianian forces.

ANSWER KEY

Module #03: Developing a Mission Statement

Question	Answer	Doctrinal Reference/Rationale
		FM 5-0 definitions: • Facts are verifiable pieces of information or information presented that has objective reality (para 2-34). • Assumptions contain information accepted as true in the absence of facts (para 2-35). • Specified tasks are tasks specifically assigned to a unit by its higher headquarters (para 3-66). • Implied tasks are tasks that must be performed to accomplish a specified task or the mission, but are not stated in the higher headquarters order (para 3-67). • Essential tasks are specified or implied tasks that must be executed to accomplish the mission (para 3-68). • Constraints are restrictions placed on the command by a higher command (para 3-70).
B-1	a-F	Fact, WARNO para 1.a.(1), 2d paragraph
	b-F	Fact, WARNO para 1.a.(2)
	c-F	Fact, WARNO para 1.a.(2) and 1.a.(4)
	d-F	Fact, WARNO para 1.a.(3)
	e-F	Fact, WARNO para 1.b.(3)(b)

Assessment Category: Technical-administrative Behaviors

Module #04: Developing COA Statement and Sketch

Scenario: You are the A/S-3 for 4-99 AR (CAB). You have received 1-74 HBCT [WARNO #2](#) and conducted mission analysis, and just completed the mission analysis brief to the CAB Commander. He has approved the following mission statement and draft commander's intent.

Mission: 4-99 AR attacks 100400APR2010 (BCT ME) on AXIS PORSCHE to destroy enemy forces in zone and seize OBJ LION to restore the international border. O/O, conduct defensive operations in sector to secure the international border.

Intent: The purpose of this operation is to restore the international border. To accomplish this, we will destroy enemy forces in zone and seize OBJ LION to secure the international border and prevent further Arianian offensive actions in Atropia. Key tasks are:

1. Reconnaissance handover with 4-49 CAV of NAIs 65, 81, 82, and 83.
2. Battle handover with 4-49 CAV of platoon-sized or larger enemy elements in zone through PL RUBY.
3. Rapid massing of combat power of two or more company/teams on identified forces in zone to overwhelm the enemy and maintain momentum of the attack.
4. Thorough reconnaissance of OBJ LION to confirm obstacle location and MIP disposition on the objective.
5. Rapid breaching or bypassing of hasty protective obstacles at the point of penetration (PoP) to allow unimpeded maneuver of the assault force on OBJ LION.
6. Fix, then attack to destroy the MIC on OBJ LION to reestablish the international border.
7. Rapid consolidation on OBJ LION to set the conditions for defensive operations in sector to prevent Arianian forces from penetrating the international border.
8. Conduct stability operations in sector to secure the international border and restore and maintain order in Atropia.

End state is enemy forces in zone destroyed and 4-99 AR postured to begin security and stability operations along the international border.

The CAB Commander has directed that the staff develop three COAs for wargaming.

Questions:

A-1: (Recall) You decide to develop draft COA sketches first and then refine them as you develop the COA statements. Of the list below, what are the minimum required items (if used) that must be included in a COA sketch? (Circle ALL that apply.)

- a. Combat power.
- b. Current unit locations.
- c. Subordinate unit formations.
- d. The FEBA, LD or LC, and phase lines, if used.
- e. Adjacent unit graphics.
- f. Assembly areas, battle positions, strong points, engagement areas, and objectives.
- g. Subordinate unit graphics.
- h. Reconnaissance and security graphics.
- i. Ground and air axes of advance, if used.
- j. Tactical mission graphics.
- k. Unit symbols.
- l. No minimum requirements as long as the statement and sketch match.

A-2: (Recall) In order for a COA to be viable for wargaming, it should meet screening criteria so the staff does not waste time on an impractical COA. What minimum screening criteria will you apply to each COA before wargaming? (Circle the BEST answer)

- a. Decisive.
- b. Acceptable.
- c. Practical.
- d. Unified.
- e. Simple.

A-3: (Recall) You decide on the screening criteria below and decide to review what the screening criteria mean with the battlestaff. (Place the definition number in the blank beside each term.)

- _____ a. Feasible.
- _____ b. Acceptable.
- _____ c. Distinguishable.

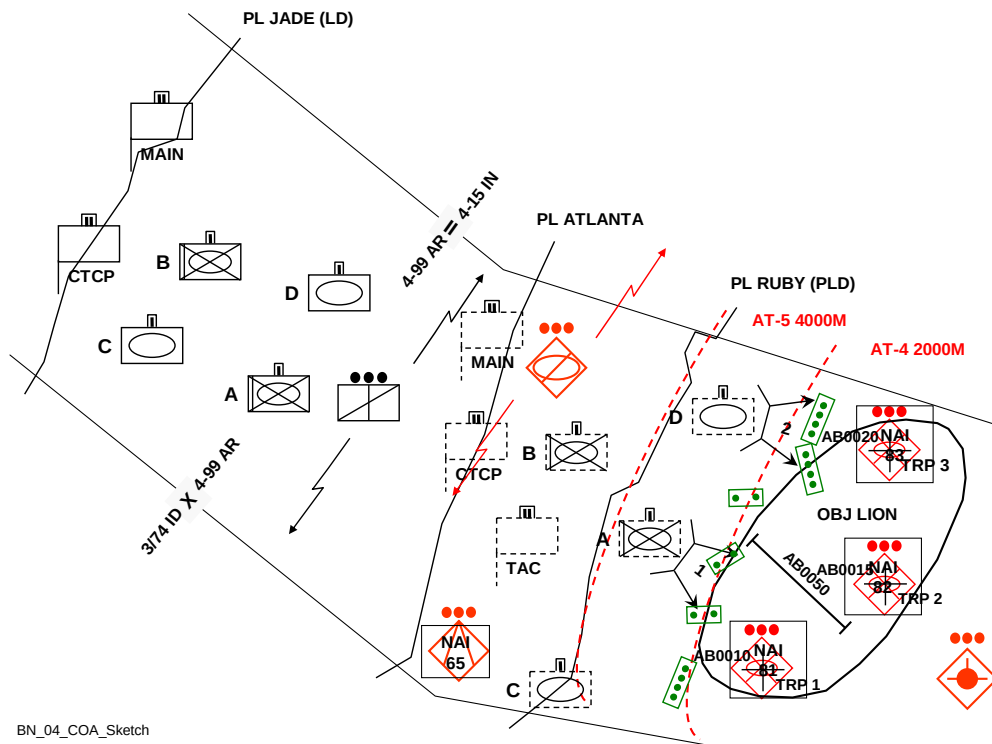
1. Each COA must differ significantly from the others. This criterion is also largely subjective. Significant differences include differences in the use of reserves, task organization, timing, or scheme of maneuver.

2. A subjective assessment that the tactical advantage gained by executing the COA must justify the cost in resources, especially casualties.

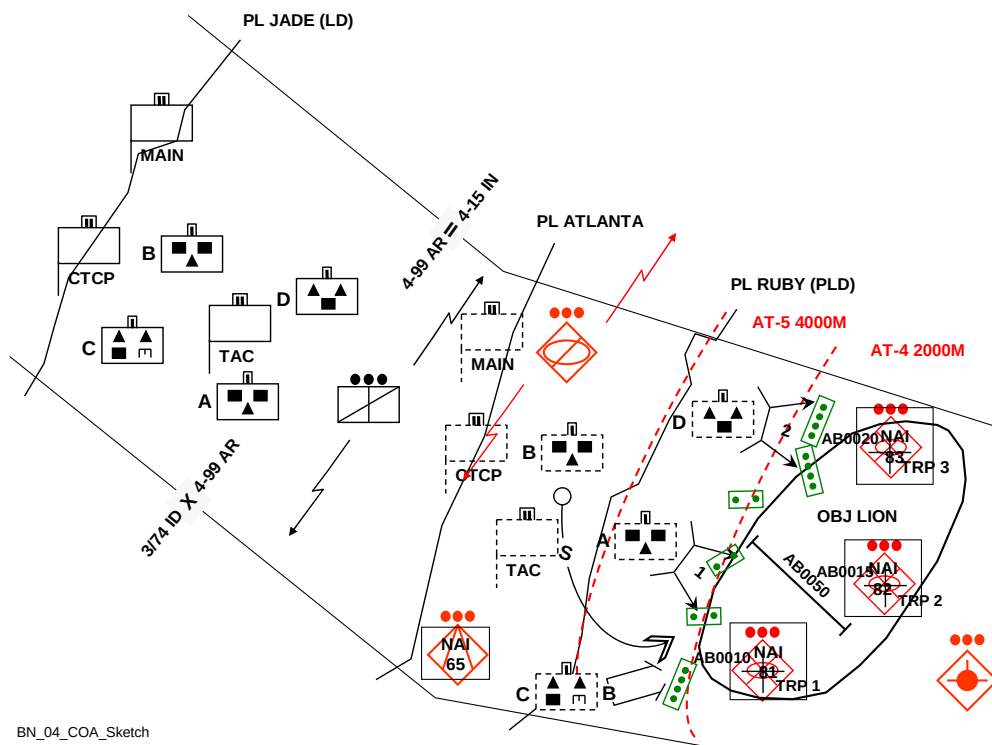
3. The COA must be able to accomplish the mission within the available time, space, and resources.

B: (Understanding) You have developed four draft COA sketches for the same COA. Which COA sketch best displays the scheme of maneuver for this operation? (Circle the BEST answer.)

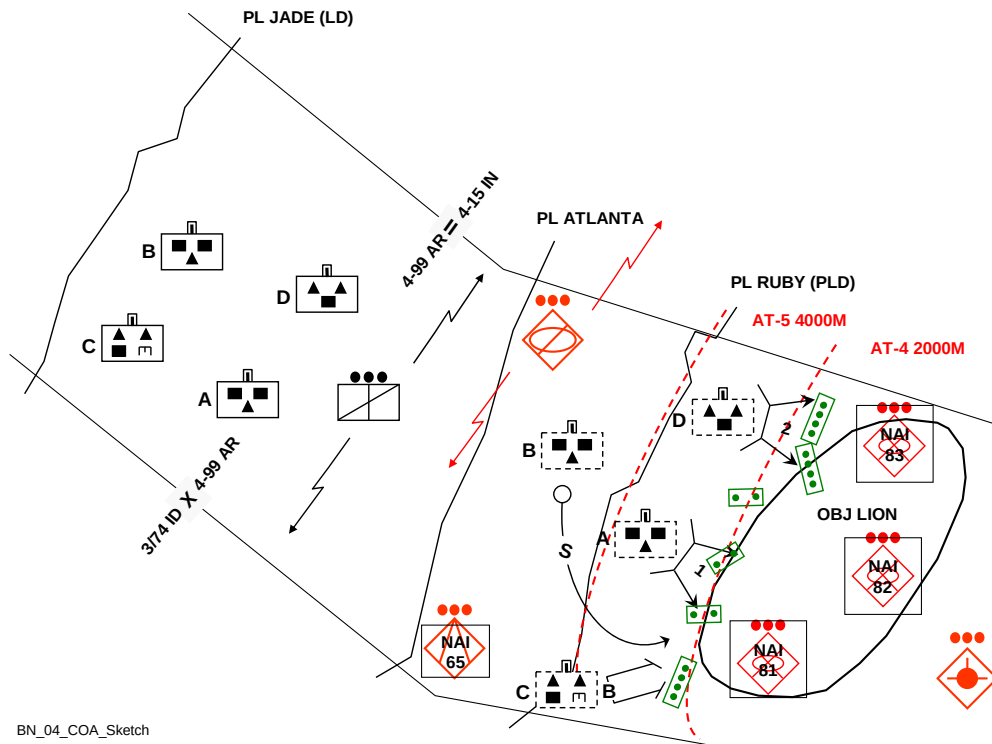
a. COA Sketch #1.



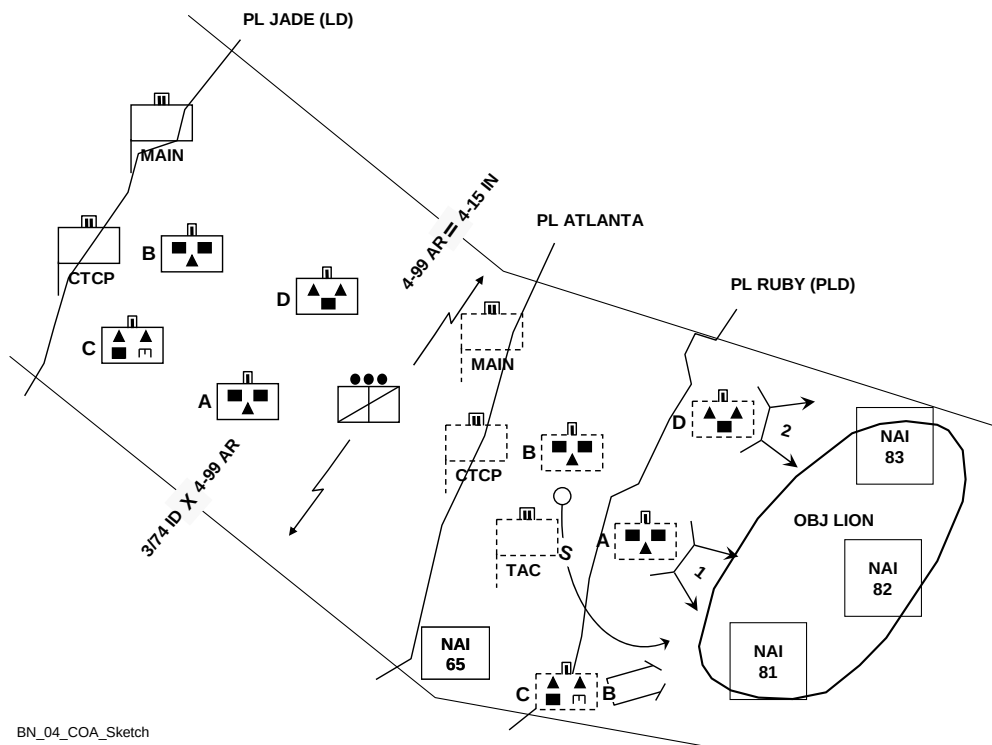
b. COA Sketch #2.



c. COA Sketch #3.



d. COA Sketch #4.



C: (Application) You have finished writing the COA statement for this COA and are reviewing it to ensure that it clearly states how the unit will accomplish the mission and explains the concept of operations. Which statement below best explains the concept of operations? (Circle the BEST answer.)

a. COA Statement #1.

Mission: 4-99 AR attacks 100400APR2010 (BCT ME) on AXIS PORSCHE to destroy enemy forces in zone and seize OBJ LION to restore the international border. O/O, conduct defensive operations in sector to secure the international border.

Intent: The purpose of this operation is to restore the international border. To accomplish this, we will destroy enemy forces in zone and seize OBJ LION to secure the international border and prevent further Arianian offensive actions in Atropia. Key tasks are:

1. Reconnaissance handover with 4-49 CAV of NAIs 65, 81, 82, and 83.
2. Battle handover with 4-49 CAV of platoon-sized or larger enemy elements in zone through PL RUBY.
3. Rapid massing of combat power of two or more company/teams on identified forces in zone to overwhelm the enemy and maintain momentum of the attack.
4. Thorough reconnaissance of OBJ LION to confirm obstacle location and MIP disposition on the objective.
5. Rapid breaching or bypassing of hasty protective obstacles at the point of penetration (PoP) to allow unimpeded maneuver of the assault force on OBJ LION.
6. Fix, then attack to destroy the MIC on OBJ LION to reestablish the international border.
7. Rapid consolidation on OBJ LION to set the conditions for defensive operations in sector to prevent Arianian forces from penetrating the international border.
8. Conduct stability operations in sector to secure the international border and restore and maintain order in Atropia.

End state is enemy forces in zone destroyed and 4-99 AR postured to begin security and stability operations along the international border.

CAB crosses PL JADE (LD), in a box formation and maneuvers using traveling overwatch with TM A in the south followed by TM C and TM D in the north followed by TM B. Once the lead TMs crosses PL ATLANTA, the CAB transitions to bounding overwatch. TMs A (supporting effort/shaping operation [SE/SO]) and D (SE/SO) attack to seize SBFs 1 and 2, respectively. TM A suppresses the MIP at TRP 1. TM D suppresses the MIPs at TRPs 2 and 3 with direct and indirect fires to prevent them from repositioning and bringing direct fire on the PoP. TM C (SE/SO) maneuvers to the southern flank of OBJ LION and breaches hasty protective obstacles at the PoP to allow TM B (main effort/decisive operation [ME/DO]) to attack to seize OBJ LION. TM B attacks to destroy the MIP at TRP 1. As TM A's fires are masked by TM B, TM A shifts direct fires to TRP 2 and TM D shifts fires to TRP 3. Once the MIP at TRP 1 is destroyed, TM B continues the attack to destroy the MIP at TRP 2 and suppresses the MIP at TRP 3. As TM B begins their attack, TM A shifts direct fires to TRP 3. Once TM B destroys the MIP at TRP 2, TM A (ME2) attacks to destroy the MIP at TRP 3 to complete destruction of the MIC on OBJ LION to allow the CAB to establish a hasty defense on OBJ LION to reestablish the international border. CAB establishes a hasty defense on OBJ LION oriented east with TM A in the north, TM B in the center, TM C in the south, and TM D as reserve center sector.

b. COA Statement #2.

Mission: 4-99 AR attacks 100400APR2010 (BCT ME) on AXIS PORSCHE to destroy enemy forces in zone and seize OBJ LION to restore the international border. O/O, conduct defensive operations in sector to secure the international border.

Intent: The purpose of this operation is to restore the international border. To accomplish this, we will destroy enemy forces in zone and seize OBJ LION to secure the international border and prevent further Arianian offensive actions in Atropia. Key tasks are:

1. Reconnaissance handover with 4-49 CAV of NAIs 65, 81, 82, and 83.
2. Battle handover with 4-49 CAV of platoon-sized or larger enemy elements in zone through PL RUBY.
3. Rapid massing of combat power of two or more company/teams on identified forces in zone to overwhelm the enemy and maintain momentum of the attack.
4. Thorough reconnaissance of OBJ LION to confirm obstacle location and MIP disposition on the objective.
5. Rapid breaching or bypassing of hasty protective obstacles at the point of penetration (PoP) to allow unimpeded maneuver of the assault force on OBJ LION.
6. Fix, then attack to destroy the MIC on OBJ LION to reestablish the international border.
7. Rapid consolidation on OBJ LION to set the conditions for defensive operations in sector to prevent Arianian forces from penetrating the international border.
8. Conduct stability operations in sector to secure the international border and restore and maintain order in Atropia.

End state is enemy forces in zone destroyed and 4-99 AR postured to begin security and stability operations along the international border.

The decisive operation is the seizure of OBJ LION. CAB crosses PL JADE (LD), in a box formation with TM A in the south followed by TM C and TM D in the north followed by TM B. TMs A and D attack to seize SBFs 1 and 2, respectively. TM C maneuvers to the southern flank of OBJ LION and breaches hasty protective obstacles at the PoP. TM B attacks to destroy the MIP at TRP 1 then TRP 2. Once TM B destroys the MIP at TRP 2, TM A attacks to destroy the MIP at TRP 3 to complete destruction of the MIC on OBJ LION. CAB establishes a hasty defense on OBJ LION oriented east with TM A in the north, TM B in the center, TM C in the south, and TM D as reserve center sector. FA Fires provide smoke to isolate the southern MIP, then suppress MIPs on OBJ LION. Mortar fires obscure the breach site to allow TM C to breach at the PoP. CAB accepts risk by not maintaining a reserve until establishing a hasty defense on OBJ LION.

c. COA Statement #3.

Mission: 4-99 AR attacks 100400APR2010 (BCT ME) on AXIS PORSCHE to destroy enemy forces in zone and seize OBJ LION to restore the international border. O/O, conduct defensive operations in sector to secure the international border.

Intent: The purpose of this operation is to restore the international border. To accomplish this, we will destroy enemy forces in zone and seize OBJ LION to secure the international border and prevent further Arianian offensive actions in Atropia. Key tasks are:

1. Reconnaissance handover with 4-49 CAV of NAIs 65, 81, 82, and 83.
2. Battle handover with 4-49 CAV of platoon-sized or larger enemy elements in zone through PL RUBY.
3. Rapid massing of combat power of two or more company/teams on identified forces in zone to overwhelm the enemy and maintain momentum of the attack.
4. Thorough reconnaissance of OBJ LION to confirm obstacle location and MIP disposition on the objective.
5. Rapid breaching or bypassing of hasty protective obstacles at the point of penetration (PoP) to allow unimpeded maneuver of the assault force on OBJ LION.
6. Fix, then attack to destroy the MIC on OBJ LION to reestablish the international border.
7. Rapid consolidation on OBJ LION to set the conditions for defensive operations in sector to prevent Arianian forces from penetrating the international border.
8. Conduct stability operations in sector to secure the international border and restore and maintain order in Atropia.

End state is enemy forces in zone destroyed and 4-99 AR postured to begin security and stability operations along the international border.

Scouts conduct reconnaissance handover at PL RUBY with 4-49 CAV and begin area reconnaissance of NAIs 65, 81, 82, and 83 to confirm enemy reconnaissance in zone and MIP disposition and obstacles on OBJ LION. CAB crosses PL JADE (LD), in a box formation and maneuvers using traveling overwatch with TM A in the south followed by TM C and TM D in the north followed by TM B. Once the lead TMs crosses PL ATLANTA, the CAB transitions to bounding overwatch. TMs A and D attack to seize SBFs 1 and 2, respectively. TM A suppresses the MIP at TRP 1 and adjusts smoke target AB 0050 to isolate the southern platoon on OBJ LION. TM D suppresses the MIPs at TRPs 2 and 3 with direct and indirect fires to prevent them from repositioning and bringing direct fire on the PoP. TM C maneuvers to the southern flank of OBJ LION and breaches hasty protective obstacles at the PoP to allow TM B to attack to seize OBJ LION. TM B attacks to destroy the MIP at TRP 1. As TM A's fires are masked by TM B, TM A shifts direct fires to TRP 2 and TM D shifts fires to TRP 3. Once the MIP at TRP 1 is destroyed, TM B continues the attack to destroy the MIP at TRP 2 and suppresses the MIP at TRP 3. As TM B begins their attack, TM A shifts direct fires to TRP 3. Once TM B destroys the MIP at TRP 2, TM A attacks to destroy the MIP at TRP 3 to complete destruction of the MIC on OBJ LION to allow the CAB to establish a hasty defense on OBJ LION to reestablish the international border. 4-99 AR establishes a hasty defense on OBJ LION oriented east with TM A in the north, TM B in the center, TM C in the south, and TM D as reserve center sector. FA Fires provide smoke to isolate the southern MIP, then suppress MIPs on OBJ LION. Mortar fires obscure the breach site to allow TM C to breach at the PoP. CAB accepts risk by not maintaining a reserve until establishing a hasty defense on OBJ LION.

d. COA Statement #4.

Mission: 4-99 AR attacks 100400APR2010 (BCT ME) on AXIS PORSCHE to destroy enemy forces in zone and seize OBJ LION to restore the international border. O/O, conduct defensive operations in sector to secure the international border.

Intent: The purpose of this operation is to restore the international border. To accomplish this, we will destroy enemy forces in zone and seize OBJ LION to secure the international border and prevent further Arianian offensive actions in Atropia. Key tasks are:

1. Reconnaissance handover with 4-49 CAV of NAIs 65, 81, 82, and 83.
2. Battle handover with 4-49 CAV of platoon-sized or larger enemy elements in zone through PL RUBY.
3. Rapid massing of combat power of two or more company/teams on identified forces in zone to overwhelm the enemy and maintain momentum of the attack.
4. Thorough reconnaissance of OBJ LION to confirm obstacle location and MIP disposition on the objective.
5. Rapid breaching or bypassing of hasty protective obstacles at the point of penetration (PoP) to allow unimpeded maneuver of the assault force on OBJ LION.
6. Fix, then attack to destroy the MIC on OBJ LION to reestablish the international border.
7. Rapid consolidation on OBJ LION to set the conditions for defensive operations in sector to prevent Arianian forces from penetrating the international border.
8. Conduct stability operations in sector to secure the international border and restore and maintain order in Atropia.

End state is enemy forces in zone destroyed and 4-99 AR postured to begin security and stability operations along the international border.

The decisive operation is the seizure of OBJ LION. Scouts conduct reconnaissance handover at PL RUBY with 4-49 CAV and begin area reconnaissance of NAIs 65, 81, 82, and 83 to confirm enemy reconnaissance in zone and MIP disposition and obstacles on OBJ LION. CAB AR crosses PL JADE (LD), in a box formation and maneuvers using traveling overwatch with TM A in the south followed by TM C and TM D in the north followed by TM B. Once the lead TMs crosses PL ATLANTA, the CAB transitions to bounding overwatch. TMs A (supporting effort/shaping operation [SE/SO]) and D (SE/SO) attack to seize SBFs 1 and 2, respectively. TM A suppresses the MIP at TRP 1 and adjusts smoke target AB 0050 to isolate the southern platoon on OBJ LION. TM D suppresses the MIPs at TRPs 2 and 3 with direct and indirect fires to prevent them from repositioning and bringing direct fire on the PoP. TM C (SE/SO) maneuvers to the southern flank of OBJ LION and breaches hasty protective obstacles at the PoP to allow TM B (main effort/decisive operation [ME/DO]) to attack to seize OBJ LION. TM B attacks to destroy the MIP at TRP 1. As TM A's fires are masked by TM B, TM A shifts direct fires to TRP 2 and TM D shifts fires to TRP 3. Once the MIP at TRP 1 is destroyed, TM B continues the attack to destroy the MIP at TRP 2 and suppresses the MIP at TRP 3. As TM B begins their attack, TM A shifts direct fires to TRP 3. Once TM B destroys the MIP at TRP 2, TM A (ME2) attacks to destroy the MIP at TRP 3 to complete destruction of the MIC on OBJ LION to allow the CAB to establish a hasty defense on OBJ LION to reestablish the international border. CAB establishes a hasty defense on OBJ LION oriented east with TM A in the north, TM B in the center, TM C in the south, and TM D as reserve center sector. FA Fires provide smoke to isolate the southern MIP, then suppress MIPs on OBJ LION. Mortar fires obscure the breach site to allow TM C to breach at the PoP. CAB accepts risk by not maintaining a reserve until establishing a hasty defense on OBJ LION.

ANSWER KEY

Module #04: Developing COA Statement and Sketch

Question	Answer	Doctrinal Reference/Rationale
A-1	d f h i j	FM 5-0, para 3-145 states that, "As a minimum, the COA sketch includes the array of generic forces and control measures, such as— • The unit and subordinate unit boundaries. • Unit movement formations (but not subordinate unit formations). • The FEBA, LD, or LC, and phase lines, if used. • Reconnaissance and security graphics. • Ground and air axes of advance. • Assembly areas, battle positions, strong points, engagement areas, and objectives. • Obstacle control measures and tactical mission graphics. • Fire support-coordinating measures. • Designation of the decisive operation and shaping operations. • Location of command posts and critical information systems (INFOSYS) nodes. • Enemy known or templated locations.

Question	Answer	Doctrinal Reference/Rationale
A-2	b	FM 5-0, para 3-113 lists the following COA screening criteria: • <u>Feasible</u>. The unit must be able to accomplish the mission within the available time, space, and resources. • <u>Acceptable</u>. The tactical or operational advantage gained by executing the COA must justify the cost in resources, especially casualties. This assessment is largely subjective. • <u>Suitable</u>. A COA must accomplish the mission and comply with the commander's planning guidance. However, commanders may modify their planning guidance at any time. When this happens, the staff records and coordinates the new guidance, and reevaluates each COA to ensure it complies with the change. • <u>Distinguishable</u>. Each COA must differ significantly from the others. This criterion is also largely subjective. Significant differences include differences in the: - o Use of reserves. - o Task organization. - o Timing (day or night). - o Scheme of maneuver. • <u>Complete</u>. A COA must show how: - o The decisive operation accomplishes the mission. - o Shaping operations create and preserve conditions for success of the decisive operation. - o Sustaining operations enable shaping and decisive operations.
A-3	a-3 b-2 c-1	See definitions above.
B	b	Sketch #2 meets the requirements in FM 5-0, para 3-145 with the exception of the following: • Did not include AXIS PORCHE since the axis includes the majority of the CAB sector in the BCT OPORD. • Did not include designation of shaping operations in the sketch, did designate the decisive operation: seizure of OBJ LION.

Question	Answer	Doctrinal Reference/Rationale
C	d	Professional military judgment. Statement #4 is designed to go with COA sketch b, above. Statement best meets the draft commander's intent, designates the decisive operation and states how shaping operations will support it. Statement provides a task and purpose for each TM, articulates a plan for isolating forces on the objective and states direct fire control measures for actions on the objective. Note: Format differs from the format outlined in Figure 3-12, FM 5-0. Sustaining operations were omitted and the concept of operations was reduced to a single paragraph.

Assessment Category: Technical-administrative Behaviors

Module #05: Performing COA Analysis

Scenario: As the A/S-3 of 4-99 AR, you have received 1-74 HBCT [WARNO #2](#). The staff has just completed the COA brief to the commander for the upcoming operation. He approved three COAs for wargaming. Additionally, he made no changes to the approved mission statement and commander's intent.

Mission: 4-99 AR attacks 100400APR2010 (BCT ME) on AXIS PORSCHE to destroy enemy forces in zone and seize OBJ LION to restore the international border. O/O, conduct defensive operations in sector to secure the international border.

Intent: The purpose of this operation is to restore the international border. To accomplish this, we will destroy enemy forces in zone and seize OBJ LION to secure the international border and prevent further Arianian offensive actions in Atropia. Key tasks are:

1. Reconnaissance handover with 4-49 CAV of NAIs 65, 81, 82, and 83.
2. Battle handover with 4-49 CAV of platoon-sized or larger enemy elements in zone through PL RUBY.
3. Rapid massing of combat power of two or more company/teams on identified forces in zone to overwhelm the enemy and maintain momentum of the attack.
4. Thorough reconnaissance of OBJ LION to confirm obstacle location and MIP disposition on the objective.
5. Rapid breaching or bypassing of hasty protective obstacles at the point of penetration (PoP) to allow unimpeded maneuver of the assault force on OBJ LION.
6. Fix, then attack to destroy the MIC on OBJ LION to reestablish the international border.
7. Rapid consolidation on OBJ LION to set the conditions for defensive operations in sector to prevent Arianian forces from penetrating the international border.
8. Conduct stability operations in sector to secure the international border and restore and maintain order in Atropia.

End state is enemy forces in zone destroyed and 4-99 AR postured to begin security and stability operations along the international border.

Following the mission analysis brief, the CAB Commander issued the following guidance:

"I want you to develop and wargame the three friendly COAs against the enemy most probable COA. Speed and tempo are most important in this operation, but not at the expense of protecting our combat power. I want to mass at least two companies on enemy forces throughout our AO as the terrain allows, to finish the fight quickly. I am particularly concerned about the AT battery's ability to disrupt our maneuver between PLs ATLANTA and RUBY. We must strip away the enemy's eyes in the disruption zone and destroy the AT Battery templated in the disruption zone quickly with direct and indirect fires to maintain tempo and our flexibility to maneuver in zone. I want the flexibility to posture the CAB to maneuver and mass our combat power north or south of OBJ LION at the point of penetration before we cross PL RUBY. Once we cross PL RUBY, I expect to be in close combat with the MIC on OBJ LION. Finally, we must rapidly consolidate on OBJ LION and establish a hasty defense with minimal repositioning of forces on OBJ LION to defeat the BTGR in the event they are committed to our AO.

As you develop your evaluation criteria, consider the guidance I've just provided you as well as the key tasks in my intent statement. I want you to provide an objective evaluation of each COA against your evaluation criteria. I'll be out talking to the company/team commanders and observing troop leading procedures, I expect a wargaming briefing when I get back in four hours. Call me if you need additional guidance during wargaming."

Questions:

A-1: (Recall) In addition to the XO, S-2, S-3, A/S-3, who should attend the wargame? (Circle ALL that apply.)

- a. CAB Commander.
- b. CAB CSM.
- c. S-1.
- d. CBRN Officer.
- e. Engineer Officer.
- f. ALO.
- g. S-4
- h. FSC Commander.
- i. BMO.
- j. HHC Commander.
- k. HHC XO.
- l. Medical Platoon Leader.
- m. Support Platoon Leader.
- n. Scout Platoon Leader.
- o. Mortar Platoon Leader.
- p. Maneuver CO Commanders.
- q. Maneuver CO XOs.
- r. Maneuver Company Platoon Leaders.

A-2: (Recall) Place the eight wargaming steps below in the correct order. (Order the steps by placing the correct sequence number, 1 to 5, in the blanks.)

- _____ a. Select the wargame method.
- _____ b. List known critical events and decision points.
- _____ c. Wargame the battle and assess the results.
- _____ d. Select a method to record and display results.
- _____ e. List assumptions.

A-3: (Recall) The XO has asked you for a recommendation on the wargaming method the staff should use to evaluate each COA. You know that the staff could devise a wargaming method of its own but you decide to review the three doctrinal wargaming methods and when they are best used before you make a recommendation to the XO.

Place the definition letter (a, b, or c) in the blank for the Box method_____

a. This method is based on a sequential analysis of events in each area of the AO. It is preferred because it focuses simultaneously on all forces affecting a particular event. An area might include more than one critical event. Under time-constrained conditions, the commander can use a modified version of this method. The modified version of this method divides the AO into not more than three sequential areas. These areas are not necessarily adjacent or overlapping, but focus on the critical actions throughout the depth of the AO.

b. This method is good for offensive COAs or in the defense when canalizing terrain inhibits mutual support.

c. This method is a detailed analysis of a critical area, such as an engagement area, a river-crossing site, or a landing zone. It is appropriate when time is constrained, as in a hasty attack. It is particularly useful when planning operations in noncontiguous AOs. When using this method, the staff isolates the area and focuses on critical events in it. Staff members assume that friendly units can handle most of the situations on the battlefield and focus their attention on essential tasks.

ANSWER KEY

Module #05: Performing COA Analysis

Question	Answer	Doctrinal Reference/Rationale
A-1	c	FM 5-0, para 3-149 states that, "COA analysis allows <i>the staff</i> [emphasis added] to synchronize the BOS [now WFF] for each COA and identify the COA that best accomplishes the mission."
	d	The CAB Commander may choose to participate in wargaming, particularly in a time-constrained environment, but in this instance, he's stated that he will be out visiting company/team commanders.
	e	
	f	
	g	FM 5-0, paras 3-154 – 3-164 list the participants in wargaming and their duties.
A-2	a-3	FM 5-0, para 3-165 lists a subset of the wargaming steps in this order: 1. List assumptions. 2. List known critical events and decision points. 3. Select the wargame method. 4. Select a method to record and display results. 5. Wargame the battle and assess the results.
	b-2	
	c-5	
	d-4	
	e-1	

Question	Answer	Doctrinal Reference/Rationale
A-3	a	Note: Definitions in the question were paraphrased from the definitions in FM 5-0 a. Box: FM 5-0, para 3-176 states that, "The <u>box method</u> is a detailed analysis of a critical area, such as an engagement area, a river-crossing site, or a landing zone. It is appropriate when time is constrained, as in a hasty attack. It is particularly useful when planning operations in noncontiguous AOs. When using this method, the staff isolates the area and focuses on critical events in it. Staff members assume that friendly units can handle most of the situations on the battlefield and focus their attention on essential tasks." b. Belt and Modified Belt: FM 5-0, para 3-174 states that, "This method is based on a sequential analysis of events in each <u>belt</u>. It is preferred because it focuses simultaneously on all forces affecting a particular event. A belt might include more than one critical event. Under time-constrained conditions, the commander can use a modified belt method. The modified belt method divides the AO into not more than three belts. These belts are not necessarily adjacent or overlapping, but focus on the critical actions throughout the depth of the AO." c. Avenue-in-depth: FM 5-0, para 3-175 states that, "The <u>avenue-in-depth method</u> focuses on one avenue of approach at a time, beginning with the decisive operation. This method is good for offensive COAs or in the defense when canalizing terrain inhibits mutual support."

Assessment Category: Technical-administrative Behaviors

Module #06: Knowing Own Role and Responsibilities

Scenario: You are a newly assigned A/S-3 of 4-99 CAB. Your unit is preparing for an upcoming operation. Your S-3 is briefing you on your roles and responsibilities within the CAB Main CP. One of those responsibilities is to act as the S-3 in his absence, which means that you would be responsible for synchronizing tactical operations with all staff sections as well as attending meetings that the S-3 would normally attend.

Questions:

A: (Recall) Which staff officers are coordinating staff officers and which are special staff officers? (Label coordinating staff officers with a "C" and special staff officers with an "S" in the blank next to each staff position.)

- _____ a. S-1.
- _____ b. S-2.
- _____ c. FSO.
- _____ d. ALO.
- _____ e. Surgeon.
- _____ f. S-6.

ANSWER KEY

Module #06: Knowing Own Role and Responsibilities

Question	Answer	Doctrinal Reference/Rationale
A	a-C	FM 3-90.5, para 2-40 and paras 2-42 through 2-57 identify the S-1, S-2, S-3, S-4 and S-6 as coordinating staff officers.
	b-C	
	c-S	FM 3-90.5, paras 2-58 through 2-61 identify the FSO, ALO, and Surgeon as special staff officers.
	d-S	
	e-S	FM 3-90.5, para 2-41 states that the coordinating staff includes the S-1, S-2, S-3, S-4, and S-6.
	f-C	

Assessment Category: Technical-administrative Behaviors

Module #07: Managing Combat Information

Scenario: You are the A/S-3 of the 1-54 IN (CAB), on duty as the night shift Battle Captain in the TOC. The BCT is deployed as part of a multinational force in a developing African nation.

The S-2 shift NCO informs you that conflicting reports have just been received on the presence of two highly sought after black list individuals, Thomas "Dull Knife" Smith and Timbo "Sniper" Moboto. Previous reports indicated that Smith and Moboto have planned several insurgent operations. The S-2 NCO indicates that both reports are in the CAB's AO and that they come from credible sources; however, the report times are too close and the locations are too far apart to be associated or linked sightings.

Current status displays indicate that A and B Companies are conducting cordon and search operations several kilometers from either sighting. D Company is conducting convoy and main supply route security operations. C Company is securing the CAB's forward operating base (FOB) and recovering from earlier patrols. Additionally, C Company has a reinforced platoon on standby as the CAB's QRF.

Questions:

B: (Understanding) While unit orders, missions, and standard operating procedures vary, a primary task of a battle captain is to manage information. From the list below, select the initial action you would take. (Circle the BEST answer.)

- a. Do not post or disseminate information on Smith and Moboto. Only accurate information should be posted to displays or disseminated.
- b. Send a WARNO to C Company to prepare to deploy the QRF and to D Company to prepare to detach a platoon to capture Smith and Moboto.
- c. Coordinate with the S-2 Section to determine steps being taken to verify and clarify these reports and accurately locate Smith and Moboto.

C: (Application) After a brief huddle with the XO, S-3, S-2, and you, the CAB Commander briefed the BCT Commander by radio. He received permission to divert forces and change missions to attempt to capture Smith and Moboto. A WARNO has been sent to A and B Companies. The CAB Commander is moving to link up with A Company near one reported location. The XO has been dispatched to link up with B Company at the other reported location. The S-2 and S-3 are moving to the TOC to coordinate the operation. From the list below, circle the actions you would take to help prepare for and synchronize this new mission. (Circle ALL that apply.)

- a. Brief the TOC Staff on the upcoming operation.
- b. Alert C Company to prepare to deploy the QRF.
- c. Coordinate with the S-2 Section to verify and clarify existing reports and ensure that updates rapidly flow to the CAB Command Group and the companies involved in the operation.

ANSWER KEY

Module #07: Managing Combat Information

Question	Answer	Doctrinal Reference/Rationale
B	c	FM 3-90.5 provides information on the duties of the battle captain. Para 3-76 states: “The battle captain has the overall responsibility for the smooth functioning of the main CP and its staff sections. This responsibility includes: • Maintaining continuous operations of the main CP while static and mobile. • Battle tracking the current situation using decision support templates, triggers and execution matrices to ensure events are proceeding as planned. • Ensuring that all stations maintain communications with and among each other, and that station personnel route and log all messages and reports according to TACSOP. • Assisting the XO to coordinate staff functions, ensuring a smooth and continuous information flow among the staff sections. • Processing essential data from the incoming flow of information; gathering all tactical and logistical information; and distributing the information to the XO, S-3, and other staff sections on a regular basis. • Ensuring prompt clearance of fires.” Additionally, FM 3-90.5, para 3-76 states, “IM in the CP can include processing emails, journals, messages, reports, FRAGOs, and requests for information (RFIs). The battle captain ensures the consistency, accuracy, and timeliness of information leaving the CP, including preparing and dispatching FRAGOs and WARNOs. In addition, he monitors and enforces chart and status board updates, which are necessary for battle management. The battle captain ensures this posted information is timely, accurate, and accessible.”
C	a c	FM 3-90.5, para 3-77 states that “The battle captain ensures that all staff sections in the main CP understand their functions in accordance with TACSOP, and coordinates staff briefings, updates to displays and charts, and other staff actions. As a focal point in the CP, the battle captain processes essential information from incoming data, assesses it, ensures dissemination, and makes recommendations to the CAB leadership. The battle captain assists the CAB commander by ensuring the WFF stay synchronized.”

Assessment Category: Technical-administrative Behaviors

Module #08: Exploiting All Staff Functions

Scenario: As the A/S-3 of 4-99 AR (CAB), you are currently working through the MDMP for an upcoming operation. Since the CAB is not authorized an S-7, you must write Annex P (Information Operations). The BCT has provided you access to the BCT's IO cell to assist you in IO planning.

Questions:

B: (Understanding) During the IPB process the S-2 may require input on IO to develop IPB templates, databases and other products on the enemy. The BCT IO cell can provide you with relevant information on the enemy. From the list below, select the information the BCT IO cell can provide you to assist in your planning. (Circle ALL that apply.)

- a. Religion, language, and culture of key groups and decision makers.
- b. Range of enemy artillery systems.
- c. Capabilities of enemy fire finder radars.
- d. Population demographics, linkages, and related information.
- e. Allegiance of local leaders to the host nation government.

ANSWER KEY

Module #08: Exploiting All Staff Functions

Question	Answer	Doctrinal Reference/Rationale
B	a d	FM 3-13, para 5-35 lists the following IO information as relevant to the IPB process: • Religion, language, and culture of key groups and decision makers. • Agendas of nongovernmental organizations. • Size and location of adversary/other forces and assets. • Military and civilian communication infrastructures and connectivity. • Population demographics, linkages, and related information. • Location and types of radars, jammers, and other non-communication INFOSYS. • Audio, video, and print media outlets and centers, and the populations they service. • C2 vulnerabilities of friendly, adversary, and other forces/groups.

Assessment Category: Technical-administrative Behaviors

Module #9: Conducting Mission Analysis

Scenario: You are the A/S-3 of 1-54 IN. The BCT had great success executing a clear-hold-build operation in the eastern provinces of a developing Pacific Rim nation. The CAB has just received a WARNO to deploy to a new AO in the western provinces. This region has been under insurgent control for an extended period.

You have assembled the battlestaff for mission analysis of the new mission. Your commander and the S-3 have returned from the BCT Main CP. The commander provided the following initial planning guidance: "XO, expect a very deliberate parallel planning effort that will involve our host nation partners and maybe a coalition medical support unit. I want you to pay particular attention in your analysis of civil considerations for this operation. A/S-3, you take the lead in pulling this analysis together with the S-2 and our acting S-9."

Questions:

A: (Recall) You and the staff were already working on the METT-TC analysis for the new mission. Since the commander's guidance has placed heavy emphasis on civilian considerations, you decide to conduct a detailed analysis of the operational environment using ASCOPE (areas, structures, capabilities, organizations, people, and events). To focus your efforts, you decide to review these considerations with the battlestaff before you begin your analysis of civil considerations. What aspects of the AO should be considered under each ASCOPE characteristic? (Place the number of the aspect to be analyzed in the blank beside each ASCOPE characteristic.)

- _____ a. Areas.
- _____ b. Structures.
- _____ c. Capabilities.
- _____ d. Organizations.
- _____ e. People.
- _____ f. Events.

1. Presence of any UN agencies operating in the AO.
2. Crop/livestock and market cycles.
3. Resources and services that can be contracted to support the military mission.
4. Recent civil disturbances or celebrations in the AO.
5. Social or religious enclaves.
6. Potential sites for the resettlement of dislocated civilians.
7. Ethnic or political rivalries and tensions in the AO.
8. Location of any toxic industrial materials.

B: (Understanding) You review the information provided by the BCT. It indicates that in the western provinces of your new AO is an area of 185,000 acres with a population of 130,000 people. Several intelligence reports indicate that insurgent information operations and propaganda have emphasized that free medical care is now available to all people under their control. However, reports also indicate that most medical doctors and nurses, considered as wealthy members of the intellectual elite and loyal to the host nation government, fled or were killed or jailed by the insurgents. While intact, hospital and health facilities in the region are reported as understaffed, ill equipped, and without most basic medications and medical supplies. Utility and service disruptions have left most without electrical power or fresh water. Recent diplomatic efforts have provided for the introduction of a small clinic with a 35-person medical team to the region. This new clinic is sponsored by the International Red Cross. Patient flow has overwhelmed the clinic since it opened. What characteristic of your ASCOPE analysis can be refined and may have the greatest impact on your new mission? (Circle the BEST answer.)

- a. Area – the approximate size of the new AO.
- b. Structures – medical facilities, hospitals, and clinics in the AO are generally intact.
- c. Capabilities – very limited medical support is available to the local populace; needs appear to be overwhelming current capacity.
- d. Organizations – at least one nongovernmental organization (NGO) is active in the AO, and local medical professional and administrative staffs are small.
- e. People – the size of the population in our new AO.
- f. Events – an NGO has opened a medical clinic in the AO.

C: (Application) The planning staff analysis indicates that the new AO is an economically depressed area. Recent diplomatic and information operations have undermined and weakened the insurgents' hold on the region. While this is good news, damage to civilian infrastructure and disruption of key services for the local population are significant. Failure to restore damaged infrastructure and re-establish key services can undermine any short term military gains in the AO. The host nation has requested immediate assistance with the list below. Based on your initial analysis, what services or functions does the CAB have a limited capacity to provide immediately as you initiate operations in the new AO? (Circle the BEST answer.)

- a. Establish public administration, public safety, and host nation government agencies.
- b. Provide for and restore fuel distribution.
- c. Restore and rebuild sewage and sanitation systems.
- d. Rebuild or restore schools and hospitals.
- e. Provide emergency medical services.

ANSWER KEY

Module #9: Conducting Mission Analysis

Question	Answer	Doctrinal Reference/Rationale
A	a-5,6 b-8 c-3 d-1 e-7 f-2,4	FM 6-0, Appendix B, paras B-37 through B-54 provide the Civil Considerations analysis methodology using ASCOPE. (Explanations were paraphrased to preserve space. Entries relating to answers are in bold italics.) Areas (para B-41) Key civilian areas are localities or aspects of the terrain within an AO that are not normally militarily significant. Examples of key civilian areas include: • <i>Social, political, religious, or criminal enclaves.</i> • <i>Possible sites for the temporary settlement of dislocated civilians</i> or other civil functions. Structures (paras B-42 – B-43) Existing structures can play many significant roles. Structures include traditional high-payoff targets, structures protected by international law or other agreements, and structures useful for military purposes. Some aspects of the civilian infrastructure, such as <i>the location of toxic industrial materials</i>, may influence operations. Capabilities (para B-44) Commanders and staffs analyze capabilities from different levels. They view capabilities in terms of those required to save, sustain, or enhance life, in that priority. Capabilities can refer to the ability to provide a populace with key functions or services, such as public safety, emergency services, and food. Capabilities include those areas in which the populace may need help after combat operations. Capabilities also refer to <i>resources and services that can be contracted to support the military mission</i>, such as, interpreters, laundry services, construction materials, and equipment. Organizations (paras B-45 – B-48) Organizations are nonmilitary groups or institutions in the AO. <i>Other organizations may come from outside the AO. Examples of these include multinational corporations, United Nations agencies, US governmental agencies, and nongovernmental organizations (NGOs), such as the International Red Cross.</i>

Question	Answer	Doctrinal Reference/Rationale
		People (paras B-49 – B-50) <i>People</i> is a general term used to describe nonmilitary personnel encountered by military forces. The term includes all civilians within an AO as well as those outside the AO whose actions, opinions, or political influence can affect the mission. Individually or collectively, people can affect a military operation positively, negatively, or neutrally. An analysis of people should identify them by their various capabilities, needs, and intentions. It is useful to separate people into distinct categories. <i>When analyzing people, commanders consider historical, cultural, ethnic, political, economic, and humanitarian factors.</i> Events (paras B-51 – B-54) <i>Events</i> are routine, cyclical, planned, or spontaneous activities that significantly affect organizations, people, and military operations. <i>Examples include national and religious holidays, agricultural crop/livestock and market cycles, elections, civil disturbances, and celebrations.</i> Other events are disasters from natural, manmade, or technological sources. Once significant events are determined, it is important to template the events and to analyze them for their political, economic, psychological, environmental, and legal implications.
B	c	FM 6-0, para B-44 states, "Commanders and staffs analyze capabilities from different levels. <i>They view capabilities in terms of those required to save, sustain, or enhance life, in that priority.</i> Capabilities can refer to the ability of local authorities—those of the host nation, aggressor nation, or some other body—to provide a populace with key functions or services, such as public administration, public safety, emergency services, and food. Capabilities include those areas in which the populace may need help after combat operations, such as, public works and utilities, public health, economics, and commerce. Capabilities also refer to resources and services that can be contracted to support the military mission, such as, interpreters, laundry services, construction materials, and equipment. The host nation or other nations might provide these resources and services."
C	e	FM 3-90.5, para 8-57 (RESTORE ESSENTIAL SERVICES) states that "The CAB is capable of providing only the most essential services. Normally, the CAB supports other government, intergovernmental, and host-nation agencies. Essential services include the following: • Emergency medical care and rescue. • Providing food and water. • Providing emergency shelter."

Assessment Category: Adaptive Skill / Leadership Behaviors

Module #10: Directing Casualty Evacuation

Scenario: As the A/S-3 of 1-54 IN (CAB), you are the night shift Battle Captain in the Main CP. The BCT is deployed as part of a multinational force in a developing African nation and is currently conducting clear-hold-build operations in the eastern provinces in cooperation with host nation (HN) forces. Operations to date have been successful, and as the focus has transitioned to the hold-build phases, the BCT directed the CAB to identify and retain a company team as the BCT's QRF. In addition to responding to unforeseen situations, the BCT Commander intends to deploy the QRF as a blocking force or raid force against insurgent targets of opportunity.

The CAB has received a WARNO to prepare the QRF for an air assault raid into a small, remote village in the nearby Pack Mountains. Intelligence reports indicate a meeting will occur between insurgent leaders to transfer currency and gold, financial resources for their future activities.

In addition to the assault helicopter company allocated for this operation, the CAB has been allocated an aviation LNO, two AH-64D fire control radar-equipped aircraft from the attack reconnaissance battalion, two H60 MEDEVAC helicopters, an ALO and two A-10 CAS sorties.

Questions:

B: (Understanding) Planners are considering mission abort criteria, and developing plans for raiding force extraction and MEDEVAC/CASEVAC for the operation. In addition to the S-1, S-4, and FSO, what staff elements need to be included in the CP casualty evacuation rehearsal? (Circle ALL answers that apply.)

- a. S-2.
- b. Main CP battle captains and battle staff NCOs on duty at the time of the operation.
- c. S-6.
- d. Chaplain.
- e. ALO.
- f. Aviation LNO.
- g. Surgeon.

C: (Application) The QRF has conducted an air assault raid into a small, remote village in the nearby Pack Mountains to capture or kill the insurgent leaders meeting there. The QRF is under heavy contact and has taken four casualties, two of which are seriously wounded and must be MEDEVAC'ed immediately. Ground transportation may not be possible for the seriously wounded due to time and security concerns. What option do you recommend to the XO? (Circle the BEST answer.)

a. Direct the QRF to stabilize the seriously wounded with their combat lifesavers and evacuate the casualties to the nearest casualty collection point, and report when the area is secure before you can launch the MEDEVAC helicopters.

b. Request the QRF identify the nearest landing zone (LZ). Have the AV LNO coordinate link-up of the two AH-64s allocated to the CAB to escort the MEDEVAC helicopters to the LZ. Request CAS through the ALO to support the QRF in contact. Have the FSO, ALO and Aviation LNO coordinate airspace control measures to support the CAS sorties for the QRF and MEDEVAC/AH-64 flight routes.

c. Request the QRF identify the LZ. Direct the AV LNO, ALO, and FSO to coordinate a joint air attack team mission to finish the fight quickly in order to deploy the MEDEVAC helicopters to evacuate the wounded.

d. Direct the QRF to stabilize the wounded and wait until the fight is over to evacuate the casualties.

ANSWER KEY

Module #10: Directing Casualty Evacuation

Question	Answer	Doctrinal Reference/Rationale
B	b f g	Professional military judgment: S-1, S-4, and the surgeon are the primary planners and executors of CASEVAC operations for the CAB. The FSO must be aware of MEDEVAC flight routes and times. He will impose temporary restrictions for flight safety while maintaining fire support for maneuver forces. The Aviation LNO will provide technical assistance in MEDEVAC flight operations and will coordinate AH-64 support, if required, to protect MEDEVAC helicopters.
C	b	Professional military judgment: Given this scenario, ground evacuation is not an option for the seriously wounded. The chosen answer provides suppression to the insurgent forces to allow employment of MEDEVAC helicopters with AH-64 support to help protect the MEDEVAC helicopters. Answer "c" is the next best choice in that it uses all available assets to defeat the insurgents and provide a safer environment to deploy the MEDEVAC helicopters; however, if this option fails, the CAB will have to request additional CAS sorties and potentially two more attack helicopters or wait until the allocated AH-64s are rearmed while the clock is ticking on the seriously wounded Soldiers. Answers "a" and "d" do not use the assets provided to the CAB and have a high likelihood of taking too much time to save the seriously wounded Soldiers.

Assessment Category: Adaptive Skill / Leadership Behaviors

Module #11: Managing Time and Tasks

Scenario: You are a newly assigned A/S-3 of a CAB preparing for deployment. You are also the Plans Officer and Day Shift Battle Captain for the Main CP. Your S-3 has tasked you with developing a Battle Rhythm for the Main CP. You must also ensure that your personal battle rhythm synchs with the Main CP's battle rhythm.

Questions:

A-1. (Recall) What is a battle rhythm? (Circle the BEST answer.)

- a. A timeline for getting things done in a CP.
- b. A control measure that standardizes CP operations.
- c. A sequenced and standardized pattern of command and control activities.
- d. An SOP for CP functions.

A-2. (Recall) What factors help determine the battle rhythm of a CP? (Circle ALL that apply.)

- a. Types and frequency of meetings.
- b. Enemy activity.
- c. Staff proficiency.
- d. Time and frequency of working groups.
- e. Current mission.
- f. The battle rhythm of the higher headquarters.
- g. Daily tasks.

A-3. (Recall) A unit's battle rhythm is a control measure for managing integration efforts. There are integrating processes and continuing activities that enhance the operations process. These must be synchronized and integrated into the overall plan. Designate the following processes and activities as integrating or continuing. (Label each item below with "I" for integrating process or "C" for continuing activity.)

- _____ a. Security operations.
- _____ b. Information operations.
- _____ c. Protection.

B. (Understanding) You are preparing for an upcoming offensive operation and have been tasked by the S-3 to participate in the targeting and combat power synchronization meetings while completing your routine CP tasks. You must decide how you will integrate your daily responsibilities into the Main CP battle rhythm.

Listed below are daily tasks for which you are responsible. In order to ensure these tasks are accomplished, and to prepare for the targeting and combat power synchronization meetings and oversee the operations of the CP, you must decide which tasks you will personally accomplish and which you will delegate. Which tasks from the list below will you delegate to your battlestaff NCOs? (Circle the BEST answer.)

- a. Monitor the status of CCIR.
- b. Ensure that CAB COP information and required status reports are provided to higher subordinate, adjacent, and supported headquarters.
- c. Supervise the flow of information among staff cells within the CAB CPs.
- d. Develop products and estimates to assist with MDMP and planning future operations.

ANSWER KEY

Module #11: Managing Time and Tasks

Question	Answer	Doctrinal Reference/Rationale
A-1	c	FMI 5-0.1, para 2-89 states that "Battle rhythm is the sequencing of standardized command and control activities within a headquarters and throughout the force to facilitate effective command and control."
A-2	c e f	FMI 5-0.1, para 2-91 states that "Many factors help determine a unit's battle rhythm. Some of these factors are the staff's proficiency, higher headquarters' battle rhythm, and current mission."
A-3	a-C b-C c-C	FMI 5-0.1, para 3-3 states that "The following <i>integrating processes</i> occur during all operations process activities. They must be synchronized with each other as well as integrated into the overall operation: • Intelligence preparation of the battlefield (IPB). • Targeting. • Intelligence synchronization. • Risk management. In addition, commanders use the military decision making process (MDMP) and troop leading procedures to integrate activities during planning and, when required, during preparation and execution. They use the rapid decision making and synchronization process (RDSP; see chapter 4) to integrate activities during execution when circumstances do not require the MDMP or troop leading procedures. The unit's battle rhythm is a key control measure for managing integration efforts." FMI 5-0.1, para 3-4 states that "The following <i>continuing activities</i> occur during all operations process activities. They must be synchronized with each other as well as integrated into the overall operation: • Intelligence, surveillance, and reconnaissance operations. • Security operations. • Protection. • Liaison and coordination. • Terrain management. • Information operations. • Army airspace command and control.

Question	Answer	Doctrinal Reference/Rationale
B	b	Professional military judgment. These tasks can be delegated to other Main CP personnel to accomplish. The A/S-3 is responsible for spot-checking, but he must free up his time to conduct his own running estimate to <i>anticipate</i> future requirements and develop COAs to meet those requirements.

Assessment Category: Adaptive Skill / Leadership Behaviors

Module #12: Maintaining Focus on Mission and Higher Intent

Scenario: You are the A/S-3 of 1-54 IN (CAB). In addition to your duties as the A/S-3, you are the night shift battle captain in the Main CP. Your BCT is deployed as part of a multinational force in a developing Pacific Rim nation and is currently in the hold phase of a clear-hold-build operation focused on protecting the villages of the agriculturally rich Hollow Valley. Current status displays indicate that B and D Companies are conducting cordon and search operations in pursuit of insurgents. C Company is conducting convoy and main supply route security operations keeping market routes open, free of obstacles, improvised explosives, insurgent tax collectors, and ambushes. A Company is securing the CAB's FOB and recovering from earlier patrols. Additionally, A Company maintains a reinforced platoon on standby as the CAB's QRF.

As the battle captain, you receive and review subordinate commanders' SITREPs prior to their dissemination to the CAB's command group and staff.

Questions:

A-1: (Recall) Prior to the start of the operation the commander and staff established information requirements and the current OPORD reinforced key information requirements and reports from the unit tactical SOP. The CAB command group wants to ensure that the information required to assess and modify the operation is available and accurate. When an operation is progressing satisfactorily, what are some critical ongoing functions that require continual adjustment? (Circle ALL that apply.)

- a. Sustainment unit movement and positioning.
- b. Available supply rate (ASR) adjustments based on ammunition, fuel, rations, and other expendable/consumable supplies on hand.
- c. Liaison and coordination with higher headquarters, adjacent, and cooperating elements.
- d. No adjustments are necessary since the operation is progressing satisfactorily.

A-2: (Recall) When operations do not proceed according to plan, adjustments to the plan are necessary. From the list of CP functions below, what function(s) best support assessment of mission accomplishment and identify a need for revision to the current plan or execution of branches or sequels? (Circle the Best answer.)

- a. Receive information.
- b. Distribute information.
- c. Analyze information.
- d. Integrate resources.
- e. Synchronize resources.

C: (Application) At 0300 hours (local), the CAB will execute an airmobile assault against a recently identified insurgent CP. Intelligence indicates the presence of several key leaders at, or near this CP. Insurgent main force elements, up to company size, are also known to be in the vicinity of the insurgent CP, but their locations have not been precisely determined. All aspects of the operation must proceed at high tempo to succeed. The commander has indicated his desire to hit the enemy hard but has emphasized the need to be agile to respond and refocus the main effort as the threat changes or opportunities develop. You and the battlestaff have about four hours to review and rehearse procedures in the main CP prior to the arrival of the lift aircraft. Which item(s) in the Main CP tactical SOP listed below will provide the best payoff for review and rehearsal prior to the start of the operation? (Circle ALL that apply.)

- a. The organization and setup of each CP.
- b. Plans for teardown and displacement of the CP.
- c. Eating and sleeping plans during CP operations.
- d. CP shift manning and operation guidelines.
- e. Physical security plans for the CP.
- f. Priorities of work during CP operations.
- g. Loading plans and checklists.
- h. Orders production.
- i. Clearance of fires drills.
- j. Techniques for monitoring enemy and friendly situations.
- k. Displays of electronic map boards and status charts.
- l. Maintenance of CP journals and logs."

ANSWER KEY

Module #12: Maintaining Focus on Mission and Higher Intent

Question	Answer	Doctrinal Reference/Rationale
A-1	a c	FM 3-90.5 discusses <i>executing operations</i>. Para 3-43 states that, "When the operation is progressing satisfactorily, there are critical ongoing functions that must occur. These include: • Focus all assets on the decisive operation. • Conduct continuous ISR and target acquisition. • Conduct security operations. • Adjust CCIR and IR based on the situation. • Perform clearance of fires. • Evacuate casualties. • Facilitate assured mobility. • Adjust graphic control measures. • Employ airspace control measures. • Continue liaison and coordination. • Maintain communications architecture. • Conduct the targeting process. • Manage movement and positioning of sustainment units. • Perform terrain management."

Question	Answer	Doctrinal Reference/Rationale
A-2	c	FM 3-90.5, para 3-72 states, "There are six basic functions that all CPs perform. The six functions are: receive, distribute, and analyze information, submit recommendations to the commander, integrate resources, and synchronize resources. <i>Receive information.</i> • Receive messages, reports, and orders from subordinate units and higher headquarters. • Monitor tactical situation. Maintain a journal of all significant activities and reports. • Maintain and update unit locations and activities. • Monitor enemy situation. • Maintain a status of critical classes of supplies. • Distribute information. • Submit reports to higher HQs. • Serve as a communications relay between units. • Publish orders and instructions. • Process and distribute information to appropriate units or staff sections. • Analyze information. • Consolidate reports. • Anticipate events and activities, taking appropriate action as required. • Conduct predictive analysis based on the tactical situation. • Identify information that relates to CCIRs. • Identify the need to execute contingency plans based on the current situation. • Submit recommendations to the commander. • Submit recommendations to the commander based on information available and analysis conducted. • Integrate resources. • Coordinate the integration of all WFF. • Synchronize resources. • Coordinate the capabilities of all WFF."

Question	Answer	Doctrinal Reference/Rationale
C	i j k	FM 3-90.5, para 3-69 states that, "TACSOPs for each CP should be established, known to all, and rehearsed. These TACSOPs should include: • The organization and setup of each CP. • Plans for teardown and displacement of the CP. • Eating and sleeping plans during CP operations. • CP shift manning and operation guidelines. • Physical security plans for the CP. • Priorities of work during CP operations. • Loading plans and checklists. • Orders production. • Clearance of fires drills. • Techniques for monitoring enemy and friendly situations. • Displays of electronic map boards and status charts. • Maintenance of CP journals and logs." Professional military judgment: Review and rehearsal of clearance of fire drills reduces the risk of fratricide while allowing the CAB to rapidly engage a fleeting enemy opportunity. Reviewing the procedures for monitoring and updating friendly and enemy situation as well as reviewing information displays improve situational awareness and enable massing of combat multipliers.

Assessment Category: Adaptive Skill / Leadership Behaviors

Module #13: Seeing the Big Picture

Scenario: You are the A/S-3 of 1-54 IN (CAB). You are the night shift Battle Captain in the CAB's Main CP. The BCT is deployed as part of a multinational force in a developing Balkan nation. The CAB has the priority mission for the BCT as the spearhead element for clear-hold-build operation in the town of Dlubac and the Long Valley, a border area that has been a stronghold for insurgent forces for some time now.

The CAB is currently focused on a cordon and search operation in south Dlubac, an urban residential area. This area provides the work force for the region's woodworking, paper mills, and furniture manufacturing plants. D Company is providing the outer cordon force while A and B Companies are executing search operations in the neighborhood. The planning process resulted in two CCIRs for this operation:

1. What efforts are the insurgents making and what tools are they using to influence the target audience in the AO?
2. Are there insurgent safe havens or safe houses within the AO?

A and B Companies have been organized and resourced with tactical site exploitation (TSE) teams to facilitate their searches and assist in answering the CCIRs.

C: (Application) Reports from A Company continue to indicate a cooperative local populace and no findings of any intelligence value. B Company reports additional finds of insurgent propaganda leaflets. In one apartment building they find reams of paper in the basement. After clearing of the area by EOD personnel, the TSE team finds additional print supplies, residue from smokeless gun powder, a small number of loose rifle primers, and empty cell phone shipping containers. Paper and print supplies and the cell phone boxes have a "ship to" label on the boxes and containers. B Company has identified the individuals associated with the apartment building for tactical questioning. Biometrics data is being collected from these individuals and from the basement area. Field translation of the labels indicates that the address is in the A Company search area. The situation map indicates that this address has been searched and cleared by elements of A Company.

With these conflicting reports and indicators, you need to provide a recommendation to the CAB Commander. (Circle the BEST answer.)

- a. The operation has proceeded without casualties. Recommend that the mission continue as planned and leave any follow up for later/subsequent missions after full exploitation and translation of discovered materials. Altering the current mission timeline or additional search of the "ship to" address would waste time and resources.
- b. The operation has uncovered inconsistencies in methods of operation and indications of poor tactical reporting. Since A Company failed to adequately search and clear the suspected address, recommend they assume D Company's outer cordon mission and have D Company conduct another search of the address. Further recommend that A Company receive additional training prior to the next mission. Change the operational timeline to allow the change in missions for each company.
- c. B Company and the TSE team have found print supplies, IED materials and empty cell phone shipping containers with "ship to" addresses in A-Company's AO. Confirm whether or not A Company has searched and cleared this address. If A Company has in fact previously

searched and cleared the "ship to" address, recommend they search the address again in light of this new information and recommend adjustments to the operational timeline accordingly.

d. The operation has provided information to answer the commander's CCIR. Recommend no further action by A Company and no change to the current plan and operational timeline.

ANSWER KEY

Module #13: Seeing the Big Picture

Question	Answer	Doctrinal Reference/Rationale
C	c	Professional military judgment: The selected answer allows the CAB to quickly exploit new tactical information provided by B Company: • Discoveries that link propaganda production to an address that was cleared with no suspicious activities. • Indications of an unusual number of cell phones (high potential for insurgent command and control and as bomb initiation devices) shipped to the same address. The situation map may have been erroneously updated with information that the address had been cleared. Confirming whether or not A Company believes they have cleared the suspected address will indicate whether there is a potential reporting/standards problem with A Company or a common operational picture problem in the Main CP. If the address has been searched and inaccurately reported, an adjustment to the operational timeline and synchronization of combat multipliers may be needed to go back and thoroughly search the suspected address again. Answers "a" and "d" take no action in light of new information provided to the Main CP and may allow a fleeting opportunity to slip away. Answer "b" poses significant risks to both A and D Companies in assuming a new mission they have not planned and rehearsed.

APPENDIX C

LIST OF DOCTRINAL SOURCES

General References

- FM 3-0. *Operations*. 27 February 2008.
- FM 3-19.4. *Military police leaders' handbook*. 4 March 2002.
- FM 3-90. *Tactics*. 4 July 2001.
- FM 7-15. *The Army universal task list*. 31 August 2003. With Change 1, 18 March 2005; and Change 2, 6 July 2006.
- FM 7-100.4. *Opposing force organization guide*. 3 May 2007.
- U.S. Army Training and Doctrine Command (2007). *Opposing force: Worldwide equipment guide, Volume 1 ground systems*. Fort Leavenworth, KS: TRADOC Intelligence Support Activity.

Company-Level References

- AR 600-20. *Army command policy*. 18 March 2008.
- FM 1-02. *Operational terms and graphics*. 21 September 2004.
- FM 1-02, Chapter 1: *Operational terms* (CAC-T Advance Copy). 30 August 2007.
- FM 1-02, Chapter 2: *Acronyms, abbreviations, and country codes* (Advance Copy). 19 June 2008.
- FM 3-20.15. *Tank platoon*. 22 February 2007.
- FM 3-21.10. *The infantry rifle company*. 27 July 2006.
- FM 3-21.71. *Mechanized infantry platoon and squad (Bradley)*. 20 August 2002.
- FM 3-24. *Counterinsurgency*. 15 December 2006.
- FM 3-90.1. *Tank and mechanized infantry company team*. 9 December 2002.
- FM 3-90.5. *The combined arms battalion*. 15 January 2008.
- FM 4-02. *Force health protection in a global environment*. 13 February 2003.
- FM 5-0. *Army planning and orders production*. 20 January 2005.
- FM 6-0. *Mission command: Command and control of Army forces*. 11 August 2003.
- FM 6-22. *Army leadership: Competent, confident, and agile*. 12 October 2006.
- FM 7-22.7. *The Army noncommissioned officer guide*. 23 December 2002.

FM 23-1. *Bradley gunnery*. 18 March 1996.

FM 34-130. *Intelligence preparation of the battlefield*. 8 July 1994.

TC 3-17. *Combat identification (CID) training integration*. 6 November 2007.

Battalion-Level References

FMI 3-04.155. *Army unmanned aircraft system operations*. 4 April 2006. With Change 1, 12 March 2008.

FM 3-13. *Information operations: Doctrine, tactics, techniques, and procedures*. 28 November 2003.

FM 3-24. *Counterinsurgency*. 15 December 2006.

FM 3-90.5. *The combined arms battalion*. 15 January 2008.

FM 3-90.6. *The brigade combat team*. 4 August 2006.

FM 3-90.61. *The brigade special troops battalion*. 22 December 2006.

FM 5-0. *Army planning and orders production*. 20 January 2005.

FMI 5-0.1. *The operations process*. 31 March 2006. With Change 1, 14 March 2008.

FM 6-0. *Mission command: Command and control of Army forces*. 11 August 2003.

APPENDIX D

ACRONYMS AND ABBREVIATIONS

1SG	First Sergeant
AA	Avenue of Approach
AD	Air Defense or Armored Division
AC	Active Component
ADA	Air Defense Artillery
AFRICOM	U.S. African Command
ALO	Air Liaison Officer
AMC	Air Mission Commander
AO	area of operations
AOR	area of responsibility
APFT	Army Physical Fitness Test
AR	Army Regulation
ARI	U.S. Army Research Institute for the Behavioral and Social Sciences
AS3	Assistant Operations Officer
ASCOPE	areas, structures, capabilities, organizations, people, and events
AT	antitank
BCT	Brigade Combat Team
BN	Battalion
BP	battle position
B/P	be prepared
BPT	be prepared to
BSA	Brigade Support Area
BSB	Base Support Battalion
BSTB	Brigade's Special Troops Battalion
BTG	Brigade Tactical Group
BTGR	Brigade Tactical Group Reserve
Btry	battery
C2	command and control
C4ISR	command, control, communications, computers, intelligence, surveillance, and reconnaissance
CAB	Combined Arms Battalion
CAC-T	Combined Arms Center – Training
CAS	close air support
CASEVAC	casualty evacuation
CAV	Cavalry
CBRN	chemical, biological, radiological, and nuclear
CCC	Captains Career Course
CCIR	Commander's critical information requirement
CCP	casualty collection point
CDR	Commander
CFA	confirmatory factor analysis

CIA	Central Intelligence Agency
CJFLCC	Combined Joint Force Land Component Command
CJTF-CS	Combined Joint Task Force-Caspian Sea
CO	Company or Commanding Officer
COA	course of action
COE	contemporary operating environment
COIN	counterinsurgency
COLT	combat observation and lasing team
CO/TM	Company/Team
CP	command post
CPN	command post node
CSM	Command Sergeant Major
CSSB	Combat Service Support Battalion
dL	distributed learning
DPICM	Dual-Purpose Improved Conventional Munition
DS	direct support
DTG	Division Tactical Group
EA	engagement area
EEFI	essential elements of friendly information
EOD	explosive ordnance disposal
EPW	enemy prisoner of war
ExEval	external evaluation
FA	Field Artillery
FEBA	forward edge of the battle area
FBCB2	Force XXI Battle Command Brigade and Below
FFIR	friendly force information requirement
FLOT	forward line of own troops
FM	Field Manual
FMI	Field Manual – Interim
FPOL	forward passage of lines
FSC	Forward Support Company
FSO	Fire Support Officer
FTX	field training exercise
GPS	Global Positioning System
HBCT	Heavy Brigade Combat Team
HE	high explosive
HHC	headquarters and headquarters company
HMMWV	High Mobility Multipurpose Wheeled Vehicle
HN	host nation
HQ	headquarters
HUMINT	human intelligence
IAW	in accordance with
IB	International Border
ID	Infantry Division
IED	improvised explosive device
IFC	Independent Fires Command

IFV	infantry fighting vehicle
IGO	international governmental organization
IMD	Independent Mission Detachment
IMDR	Independent Mission Detachment Reserve
INFOSYS	information systems
INTSUM	intelligence summary
IO	information operations
IPB	intelligence preparation of the battlefield
IR	information requirement
ISR	Intelligence, surveillance, and reconnaissance
JNN	Joint Network Node
JRTC	Joint Readiness Training Center
JTF	Joint Task Force
LC	line of contact
LD	line of departure
LNO	liaison officer
LR	long range
LZ	landing zone
LTP	Leader Training Program
MC3	Maneuver Captains Career Course
MC3-AC	Maneuver Captains Career Course – Active Component
MC3-RC	Maneuver Captains Career Course – Reserve Component
MDMP	military decision making process
MEDEVAC	medical evacuation
METT-TC	mission, enemy, terrain and weather, troops and support available, time available, and civil considerations
MI	Military Intelligence
MIBN	mechanized infantry battalion
MIC	mechanized infantry company
MIP	mechanized infantry platoon
MOS	military occupational specialty
MP	Military Police
MSR	main supply routes
NAI	named area of interest
NATO	North Atlantic Treaty Organization
NCO	noncommissioned officer
NGO	nongovernmental organization
NTC	National Training Center
NVD	night vision device
OB	order of battle
OBJ	objective
O/C	observer/controller
OEF	Operation Enduring Freedom
OIF	Operation Iraqi Freedom
O/O	on order
OPCON	operational control

OPORD	operation order
OPSEC	operations security
OSC	Operational Strategic Command
PA	physician's assistant
PCC	pre-combat check
PCI	pre-combat inspection
PIR	priority intelligence requirement
PL	phase line
PLD	probable line of deployment
PLT	Platoon
POC	point of contact
POI	program of instruction
PoP	point of penetration
QRF	quick reaction fire
R&S	reconnaissance and surveillance
RAP	rocket-assisted projectile
RC	Reserve Component
RETRANS	retransmission
RHO	reconnaissance handover
ROE	rules of engagement
ROI	rules of interaction
RPG	rocket propelled grenade
S1	Personnel Officer
S2	Intelligence Officer
S3	Operations Officer
S4	Logistics Officer
S6	Signal Officer
SA	situational awareness
SB	support battalion
SAP	student assessment package
SBF	support by fire
SEP	system enhanced program
SIG	signal
SIGINT	signal intelligence
SIR	specific information requirements
SITREP	Situation Report
SJT	situational judgment test
SME	subject matter expert
SMK	smoke
SOF	Special Operations Forces
SOI	signal operating/operations instructions
SOP	standard/standing operating procedures
SP	start point
Sqdn	Squadron
TAA	tactical assembly area
TACON	tactical control

TACSOP	tactical standing operating procedures
TAI	target(ed) area of interest
T-BARS	Tactical Thinking Behaviorally Anchored Rating Scale
TBD	to be determined
TBP	to be published
TC	Training Circular
TCP	traffic control point
TDE	tactical decision exercise
TF	Task Force
TI	target identification
TLP	troop leading procedures
TM	team
TOC	tactical operations center
TOW	tube-launched, optically-tracked, wire-guided (missile)
TRADOC	U.S. Army Training and Doctrine Command
TRM	tactical road march
TTP	tactics, techniques, and procedures
UAS	unmanned aircraft system
VEILS	Virtual Experience Immersive Learning Simulation
WARNO	warning order
WCS	weapons control status
WIA	wounded in action
XO	Executive Officer