Technical Report 1295

Army Officer Job Analysis: Identifying Performance Requirements to Inform Officer Selection and Assignment

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Human Resources Research Organization

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14. ABSTRACT *(Maximum 200 words)*:

This report includes lists of leadership and technical duties performed by all Army officers and the skills, abilities, and other characteristics (SAOs) required to perform those duties. It also includes draft lists of branch-specific technical duties for entry-level officer positions in five branches: Armor, Infantry, Signal, Quartermaster, and Transportation. We developed draft lists based on existing Army doctrine and past studies of officer competencies and duty requirements, supplemented by the civilian leadership literature, research on Army enlisted jobs, and research on attributes related to retention. The lists were vetted by Army officers in several positions (platoon leader, company commander, battalion XO, battalion S3, and battalion commander), although there were very few reviewers from higher-ranking positions. We could not fully delineate branch-specific technical duties due to the lack of current documentation and difficulty accessing officers as subject matter experts. As a consequence, additional research and significant input from Army officers would be required to fully delineate branch-specific requirements for the Signal, Quartermaster, and Transportation branches. However, detailed specification of branch-specific technical requirements is not necessary to support development of predictor and criterion measures for use in entry-level selection and initial officer assignment.

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PERFORMANCE REQUIREMENTS FOR USE IN OFFICER SELECTION AND
ASSIGNMENT: FINAL REPORT

EXECUTIVE SUMMARY

Research Requirement:

The research requirement was to identify Army officer performance requirements for use in
officer selection and assignment. The project focused on requirements for five positions: platoon
leader, company commander, battalion XO, battalion S3, and battalion commander and focused most
attention on Army-Wide requirements, supplemented by an effort to identify branch-specific
requirements for several branches.

Procedure:

HumRRO defined performance requirements as the things that officers are expected to be
able to *do* on the job with a reasonable degree of proficiency, and we called these Major Duties
(MDs). We compiled lists of major duties (MDs) performed by all officers in each of the five
positions listed above based on Army doctrine and training materials. We also explored an
approach for identifying branch-specific technical MDs in five branches: Armor, Infantry,
Signal, Quartermaster, and Transportation. Next, we compiled lists of skills, abilities, and other
characteristics (SAOs) required to perform the MDs based on studies of Army leader
competencies and supplemented by research on leadership and turnover/retention in other
branches of the U.S. military and in the civilian sector. Finally, we asked Army officers to
review the lists to ensure they reflected current Army practices. We used qualitative feedback to
revise the lists of MDs and SAOs, and then collected quantitative evaluations of importance and
frequency of performance from 180 Army officers, most at the captain level (O3 pay grade).

Findings:

We identified a number of important MDs and SAOs for each of the five positions that were
the target of this project. The lists of MDs and SAOs are presented in appendices B-L. These lists
were vetted by officers at each level, although there were very few reviewers at the higher-ranking
levels. We also prepared draft descriptions of branch-specific MDs and were able to obtain a
reasonable level of review and consensus for the Armor and Infantry branches. For the other
branches, we discovered that there is considerable variability in technical duty assignments within the
branch, depending on the officer's functional duty assignment. We also found that the Army's
ongoing transition to a modular, brigade-centric structure is leading to significant changes in branch-
specific duties. The changing duty requirements have not been fully documented in published Army
doctrine. As a consequence, the approach that worked for identifying leadership and Army-Wide
technical MDs did not work very well for identifying branch-specific technical MDs. If the Army
wishes to fully develop branch-specific MDs, it will likely need to work directly with Army officers
and instructors in those branches or wait until updated doctrine has been published.

The MDs provide the foundation for future efforts to develop measures of officer job performance which, in turn, can serve as criterion measures in future validation studies. The SAO list provides the foundation for evaluating the extent to which current officer selection and assignment procedures measure important SAOs, as well as a way to prioritize future predictor development efforts. Such predictor development efforts should focus on important SAOs that are not well-measured in the current officer selection process.

Utilization and Dissemination of Findings:

The results of this effort will support identification of existing or development of new predictor measures for use in officer *selection*, as well as information necessary to support development of criterion measures against which such predictor measures can be validated. This effort provides a starting point for developing predictor measures to support officer *assignment* in the Infantry and Armor branches and the type of criterion measures necessary to validate such predictors. Further research will be required to support development of predictor or criterion measures for other branches. The result of this effort could also support efforts to develop officer performance metrics by helping to delineate leadership duties that should be considered in such measures.

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**PERFORMANCE REQUIREMENTS FOR USE IN
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Chapter 1. Introduction

The Army faces complex challenges in building and sustaining its officer force. These challenges are partially based on conditions and events rooted long in the past. In 1997, following the post-Cold War drawdown, the Army had a mandated end strength of 482,000 personnel. To sustain a supporting officer corps, the Army needed to access about 4,300 officers per year under this ceiling. However, between 1991 and 1999, officer accessions averaged only about 3,800, with year group (YG) 1998 dropping to 3,600 (Henning, 2006). In contrast, the Army currently has more early-career officers than it needs (Tice, 2010), given the reductions in force in Iraq and Afghanistan, though the effects of the shortage from the 1990s is still being felt.

The officer shortages in the 1990s resulted in higher than typical promotion rates for officers accessed during that time period, leading some commentators to express concern that the officer corps is of lower quality than in the past, with implications for officer morale and retention in general (Kane, 2011; Wardzynski, Lyle, & Colarusso, 2010). For example, as recently as 2006, promotions to captain and to major were both at about 98% of those eligible, compared with an historical average of about 70% (Henning, 2006; Wardzynski, et al, 2009, 2010). Even promotions to lieutenant colonel, historically about 65% of an already culled officer group, were exceeding 85% of eligible majors. In the current environment, officers will likely face stiff competition for promotions, with some indications that the Army is moving back to an up-or-out system (Tice, 2010).

Officer attrition must also be taken into account, to the extent possible, in an officer procurement program. Most initial officer attrition occurs at the 3-, 4-, or 5-year point (depending on the commissioning program and active duty service obligation) (Wardzynski, Lyle, & Colarusso, 2010). After that, consistent with subsequent incurred obligations, an officer may leave at any time. Historically, officer attrition at the initial obligation expiration has averaged about 8.5% (Henning, 2006). Of concern is the fact that, in the mid-late 2000s, the attrition rate for mid-career officers was higher than typically seen. For example, the attrition rate of those already promoted to major rose to 7% in 2006 while attrition (mostly retirements) of lieutenant colonels (O5) rose to 14% in 2006 (Henning, 2006). With the current reduction in force strength, some officer attrition may be "good" in the sense that the Army needs fewer officers. However, there is some evidence that more highly talented officers are more likely to leave, and this is not the type of attrition that any organization desires (Kane, 2011; Wardzynski, et al, 2010).

Finally, as noted in the 2010 *Quadrennial Defense Review* and by many commentators, the U.S. military continues to perform a wide range of missions and operates in many different environments. Officers in all of the service branches and at all levels must be highly adaptable and they must develop a strong geopolitical awareness. They must be open to and respectful of cultural differences when dealing with allies and coalition partners, including the possibility that yesterday's enemy is today's ally.

Unlike enlisted manning, the officer pipeline must start long before the individual is needed. The Reserve Officer Training Corps (ROTC), which traditionally supplies about 65% of line officer requirements, normally has a 4-year lead time to commissioning. Officer Candidate School (OCS) provides the quickest source for officer accession but even that process normally takes 15 to 20 months for commissioning. Changes to officer accession applied today may not be fully felt in midterm officers until the early to mid-2020s. Officer procurement programs must therefore be long term and based on studied projections about future conditions and operating climate. This is the context in which the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) initiated a series of studies focusing on officer selection and assignment.

ARI's Officer Research Program

The Army must commission officers who are likely to perform well as junior officers, fit into the Army's culture, demonstrate leadership potential for higher ranks, and stay beyond their initial Active Duty Service Obligation (ADSO). To address this requirement, the United States Army Research Institute for the Behavioral and Social Sciences (ARI) has undertaken a program of research to enhance officer selection, assignment and retention. An overview of ARI's Officer Research Program appears in Figure 1.1.

The first project in this series is the officer job analysis which is being conducted by the Human Resources Research Organization (HumRRO) and is the focus of this report. The follow-on predictor and criterion development efforts will be conducted simultaneously, such that, ultimately, both types of measure can be used in a criterion-related validation project. Predictor and criterion development will draw heavily on ARI's ongoing research efforts focusing on selection and assignment in the Reserve Officer Training Corps (ROTC; e.g., Putka, 2009; Putka et al., 2009) and OCS (e.g., Russell, Allen, & Babin, 2010; Russell & Tremble, 2009).
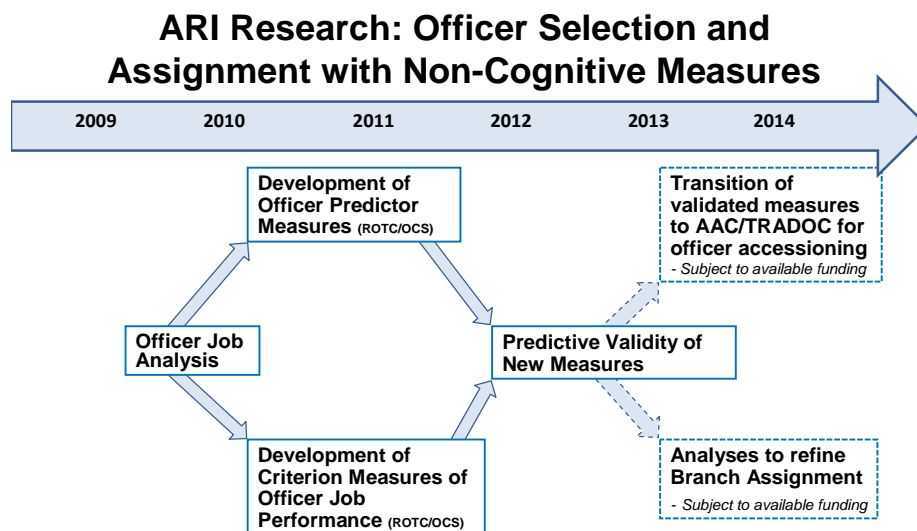
Figure 1.1. ARI's officer selection and assignment research program.

The Officer Job Analysis Study

The two primary building blocks in the job analysis are (a) major duties (MDs) performed by all officers (i.e., Army-Wide) and those performed within specified branches and in specific positions and (b) the skills, abilities, and other characteristics (SAOs) required to perform these MDs effectively. These building blocks can be used to support development of predictors for use in officer selection and assignment, and to support development of criterion measures against which the predictor measures can be evaluated.

The Army's most immediate need is to identify predictor measures that can be administered pre-accession to help the Army (a) screen out candidates unlikely to succeed in officer training and (b) select candidates with the highest likelihood of succeeding in officer training, performing effectively in the first stages of their Army career, showing potential for senior leadership positions, and remaining committed to the Army beyond their ADSO. Of course, predictor measures administered prior to accession can only focus on abilities and skills that candidates can reasonably be expected to possess at that time. It is important to evaluate how well such predictor measures work by examining, when feasible, the empirical relationship between predictors and outcome (criterion) measures of interest to the Army. In order to conduct these empirical evaluations, it is necessary to develop accurate and reliable criterion measures.

The tools developed in this project can also help the Army assign officer candidates to branches that will best utilize their skills and abilities. Making and evaluating officer assignment (classification) decisions is much more complex than making and evaluating accession decisions. In accession decisions, the focus is on individuals, specifically, making predictions about the likelihood that any particular candidate will perform effectively on the outcome(s) of interest. In officer assignment, the focus must be on the entire cohort of officers and how well, as a group, the assignment process maximizes the group's effectiveness and retention, relative to the existing assignment process. The optimum assignment solution requires consideration of both the qualities and preferences that officer candidates bring to the table and the type and number of positions that the Army must fill. For example, there will always be far more Maneuvers, Fires, and Effects (MFE) slots than there are officer candidates for whom these positions are the ideal fit. The challenge, in classification, is to identify those candidates best suited for MFE branches and make sure they are assigned to these branches while also trying to maximize the overall fit across all branches. Evaluating the effectiveness of assignment solutions requires collecting predictor and subsequent performance data on a sufficiently large sample of officers in each of many different branches, a daunting data collection challenge.

Another goal of the job analysis project was to explore an approach for identifying MD requirements. We proposed and used an approach that has worked successfully in the past for identifying MOS-specific requirements for Army enlisted occupations. In this project, the approach worked very well for identifying leadership and Army-Wide technical MDs, but did not work as well for identifying branch-specific MD requirements, in large part because there is less documentation of branch-specific doctrine and training standards for officer branches than for enlisted MOS. As noted above, the lack of documentation is one by-product of the massive organizational change that the Army is undergoing as it transitions to a brigade-centric structure (Johnson, Peters, Kitchens, & Martin, 2011). This finding will likely have implications for

follow-on criterion development, particularly of measures of job knowledge, because it may be difficult to locate up-to-date materials or written doctrine on which to base test questions. In the absence of such documentation, it may be necessary to (a) use more broadly defined criterion measures, for example, a single rating of overall technical performance rather than ratings on specific technical duties and/or (b) to obtain substantial support and input from Army personnel with the relevant types of expertise, for example, training instructors and/or officers. An alternative to accessing current officers is hiring recently retired officers to serve as SMEs, taking care to find retired officers whose knowledge base is up-to-date with current Army requirements.

Capturing Technical and Leadership Performance Requirements

Every officer job involves technical and leadership duties, and it is important to delineate both types of duties in a comprehensive study of performance requirements. Technical duties are the "how-to" part of the officer's job, involving application of knowledge or skills specific to a particular domain, for example, applying knowledge of protocol and doctrine to conduct a mounted operation or to establish a communications link in a forward operating base. Some technical duties are Army-Wide, meaning that every officer is trained and expected to be able to do the activity, though the frequency with which such activities must be performed varies across levels and branches. An example of an Army-Wide technical duty is "Perform combat lifesaving (CL) and evacuation." Other technical duties might be required in only some branches or in only some positions within a branch, for example, "Conduct tank movement" or "Plan combat net radio support." The latter duties, of course, are learned in post-commissioning training.

In addition to technical duties, every officer job also involves leadership duties, such as planning missions, assigning and delegating work, training and developing subordinates, and monitoring and evaluating subordinate performance. The amount of time spent doing particular leadership duties, their relative importance, and the severity of consequences associated with doing them poorly varies by level, but none of them are *unimportant* at any officer level.

Capturing Army-Wide and Branch-Specific Technical Requirements

As noted above, some MDs are performed by all (or most) officers, while others are performed primarily, or exclusively, by officers within a particular branch. The branch-specific information is most relevant for supporting officer classification research. At the outset of this project, ARI anticipated that it would be possible to identify branch-specific requirements for 5-10 officer branches. HumRRO was concerned that it would be very difficult to identify a single set of branch-specific MDs that would be relevant for all officers within each target branch, given our prior knowledge of how duties vary by position within a branch. Ultimately, ARI and HumRRO agreed that we would draft branch-specific technical major duties for the following five branches:
- Infantry
- Armor
- Signal
- Quartermaster
- Transportation

We chose these branches because they represent core aspects of the Army's mission and represent each of the three functional categories in the officer personnel management system: (a) Maneuvers, Fires, and Effects (Infantry, Armor), (b) Operations Support (Signal), and (c) Force Sustainment (Quartermaster, Transportation). Based on our team's knowledge of the Army, we also knew that these branches vary in their degree of within-branch variability, which meant that we could explore how such heterogeneity impacted our job analysis approach.

Complexities in Identifying Officer Performance Requirements

Within-Branch Heterogeneity

When searching for source documents and during discussions with ARI and Army officers, we learned that most branches are not very homogeneous—basically, there are different occupational clusters within branch. For example, Table 1.1 shows several functional assignments within the Quartermaster branch at the platoon leader and company command levels. There may be some duties common to all of these assignments but there are also duties unique to each assignment. Similarly, within the Armor branch, duty requirements vary to some degree depending on the type of unit (tank versus cavalry [reconnaissance]). At the same time, there are similarities and overlap in some duties across branches. For example, cavalry (reconnaissance) units may be led by an Infantry or an Armor officer, depending on the type of Brigade Combat Team (BCT) of which they a part. Blurring of branch boundaries also occurs in the Quartermaster, Transportation, and Ordnance branches. All officers in these three branches attend the same Logistics Officer Captains Career Course, after which they are considered part of the Combined Logistics branch. At this point, they may be assigned to company command (and higher) positions specific to their original branch, or they may be assigned to any of a large number of multifunctional logistics slots (Introducing the Logistics Branch, 2007).

There appears to be more within-branch variability in MD requirements at the platoon leader and the company commander levels than at higher levels of leadership, likely because at higher levels there is more emphasis on leadership duties and less emphasis on technical duties.

Table 1.1. Typical Functional Assignments for Quartermaster Branch at the Company Grade Levels

Assignment	Platoon Leader	Company Command
Typical Functional Assignments	QM Platoon Leader	QM Company Command
	Supply Platoon	General Supply Officer
	FSC Distribution Platoon	Supply and Service Officer
	Petroleum/Water Platoon	Aerial Delivery Officer
	Rigger Platoon	Mortuary Affairs Officer
	Mortuary Affairs Platoon	
Typical Multi-Functional Assignments	FSC Platoon Leader	FSC Company Command
	Maintenance Platoon	Maintenance/Transportation Company Command
	Transportation Platoon	

Changing Organizational Structure

As noted above, the Army is moving to a modular, brigade-centric structure (Feickert, 2007). According to the 2010 *Quadrennial Defense Review Report* (Department of Defense,

2010), there are 45 Active Army maneuver brigade combat teams (BCT), each one supported by a brigade support battalion (BSB). There are three primary types of maneuver BCT: Light, Heavy, and Stryker (Department of Defense, 2010; Johnson et al., 2011). Officer technical duties could vary depending on the type of modular brigade in which he/she is working (e.g., light, heavy, Stryker for maneuvers BCTs), in addition to his/her level and branch assignment. Similarly, technical duties could vary depending on the type of BSB in which an officer is working. Fully exploring potential differences across different types of BCT and BSBs was beyond the scope of the current contract and, in fact, delineating all of these differences, as they impact branch duties or individual assignments, would require substantial input from Army officers or recent retirees. These issues complicated our efforts to identify branch-specific performance requirements because doing so would have required extensive travel to different Army locations to gain SME representation across all BCT and BSB types. The methodology used in this project captured core leadership MD requirements that apply to all branches, as well as several Army-Wide technical MDs. These MDs provide a foundation for entry-level officer selection and, arguably, capture the most critical aspects of being an Army officer, that is, performing leadership duties. Our inability to delineate the specific technical duties performed by officers in each branch and in each different type of brigade structure has little implication for entry-level selection, because branch-specific technical knowledge is developed after commissioning. On the predictor side, measures would need to focus on things that are and can be known about the candidates at the point of application, for example, their level of interest in or background experiences that suggest they might thrive in certain branches or their knowledge or aptitude in broad areas such as electronics or engineering. These types of predictors can be developed using relatively broad information about the various branches, for example, at the level of information that might be available on an website. On the criterion side, retention and branch satisfaction could be measured without branch-specific information. Also, supervisors could rate technical performance at a broad level, again without further specification of technical duties. Job knowledge tests would suffer most from lack of technical duty specification, but many validation projects do not include JKTs because they are more laborious to develop than rating scales and can become outdated relatively quickly. In sum, we do not believe that the inability to define branch-specific technical requirements place severe restrictions on the Army's ability to develop or validate measures for entry-level officer selection or initial branch assignment decisions.

Officer Level Differences

The primary targets were five positions across four levels: platoon leader (O1/O2), company commander (O3), battalion XO (O4), battalion S3 (O4), and battalion commander (O5). These positions reflect one relatively common officer career path, and also represent a critical path to senior levels of leadership (e.g., brigade commander, general officer). Thus, it makes sense to focus on identifying performance requirements for these five positions and levels. We note, however, that there are alternate career paths, particularly beyond the company command level, that may involve different technical duties. In contrast, we believe that the leadership MDs identified under this contract will generalize across all officer positions up to and including the battalion command level, though their relative importance and frequency likely varies across positions and levels.

Career paths also vary by branch. For example, in the Signal branch, there are very few battalion command slots, but the G6 (Division staff) position is considered "equivalent" to battalion command. Similarly, the S6 position at the battalion level is usually filled by a captain (O3) and is considered "equivalent" to a company command position. In fact, there are more S6/G6 slots in the Signal branch than there are company command or battalion command slots. We had to take this kind of variation into account when developing the branch-specific MDs. In fact, for the Signal branch, we were able to develop MDs for the Battalion S6 position within the Division/Corps side of this branch, but we were unable to find enough documentation to draft MDs for a company command position in this branch.

Organization of this Report

In the remainder of this report, we summarize our job analysis approach and findings. Chapter 2 describes how we derived lists of MDs and Chapter 3 describes how we developed a comprehensive list of SAOs. Chapter 4 describes efforts to obtain subject matter expert (SME) review of the draft MDs and SAOs. Finally, Chapter 5 discusses next steps.

We present the final products of this effort in Appendices B through L, to make it easier for readers to find the particular list in which they are interested. Subsequent appendices contain copies of our data collection protocols and quantitative evaluations collected in early site visits. Following is a listing of the appendices containing our final products:

- Skills, abilities, and other characteristics (SAOs) (Appendix B)
- Leadership major duties with judgments of relative importance according to the levels in the Stratified Systems Theory (SST) (Appendix C)
- Army-Wide technical major duties for platoon leaders and company commanders (Appendix D)
- Army-Wide technical major duties for battalion S3s (Appendix E)
- Army-Wide technical major duties for battalion XOs (Appendix F)
- Army-Wide technical major duties for battalion commanders (Appendix G)
- Branch-specific technical major duties[1] for
  - Armor tank and cavalry platoon leaders and troop/company commanders (Appendix H)
  - Infantry platoon leaders and company commanders (Appendix I)
  - Signal division/corps platoon leaders (tactical and strategic) and battalion S6s (Appendix J)
  - Quartermaster distribution and supply platoon leader positions (Appendix K)
  - Transportation platoon leaders (Appendix L)

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[1] Note that the branch-specific MDs are in need of additional review by Army subject matter experts. For some branches, the draft MDs are based on source documents that we know to be outdated, but were the only available source that we could locate after extensive searching.

Chapter 2. Identifying Officer Major Duties

Major duties (MDs) describe both the leadership and the technical performance requirements of officer positions. A MD is a higher level descriptor than a task statement. Higher level descriptors are appropriate for this project given that the results will be used to support officer selection, retention, and classification. A highly detailed explication of officer job tasks is not necessary for these purposes.

We did not start from scratch. We drew from existing information about military officer requirements and leadership positions in the civilian sector, particularly job analysis, competency modeling, and training information already available for Army officer jobs. We also used results from prior studies, such as a project called *Army O*NET,* to explore the possibility of using the U.S. Department of Labor's Occupational Information Network (O*NET; www.onetcenter.org) to describe Army competency requirements (Russell et al., 2008) and an explication of brigade staff tasks (Ford & Campbell, 1997). We compiled all of the relevant information and worked with our technical advisory committee to devise an organizing structure that would capture similarities and differences across Amy officer occupations using a common set of descriptors. In this type of approach, the importance and relevance of various MDs can vary but the system comprehensively captures all requirements.

This chapter describes how we developed lists of leadership and technical (Army-Wide and branch-specific) MDs. Chapter 4 describes how the lists were reviewed and revised by Army SMEs.

Leadership Major Duties

We used the most current Field Manual on Army Leadership (Department of the Army, 2006; FM 6-22 *Army leadership: Competent, confident, and agile)* as the primary basis for defining the leadership MDs for platoon leader, company commander, battalion staff, and battalion commander positions. We also reviewed information available from a study of Army officer requirements conducted in the late 1980s (Steinberg & Leaman, 1990) as well as research applying the *Stratified System Theory* (SST; Jacobs & Jacques, 1990) to the Army leadership framework, as expanded by Hunt (1991) and applied in the military context by researchers at the *Army War College, Walter Reed Army Institute of Research,* and *Center for Army Leadership* (Fallesen, 2006; Fallesen & Reichard, 2005; Wong, Bliese, & McGurk, 2003).

There are several reasons for using FM 6-22 as a starting point. First, FM 6-22 presents the *Army Core Leadership Model* (ACLM; Fallesen & Reichard, 2005; Horey et al., 2004; Horey et al., 2007) that provides the overarching structure for the Army's current thinking on leadership. As part of its development, the ACLM was mapped to several relevant leadership frameworks, including (a) earlier Army leadership frameworks, (b) models of 21st century Army leadership (e.g., Blackwell & Bozek, 1998; Ford, Campbell, Campbell, Knapp, & Walker, 2000), (c) leadership frameworks from other military services and the federal government (see Horey & Fallesen, 2003), and (d) civilian approaches to leadership such as taxonomies of leader behaviors, models of situational leadership, and theories of transformational leadership, among others (see Horey et al., 2004). The ACLM also mapped to the *Leader Development Strategy for*

a 21st Century Army (Department of the Army, 2009b), making it consistent with the Army's current leadership training doctrine.

A second reason for beginning with FM 6-22 is that it considers differences in requirements at the multiple levels of leadership (Hunt, 1991; Jacobs & Jacques, 1990). According to SST, requirements at the *direct*, *organizational*, and *strategic* levels of leadership differ in terms of (a) the mix and complexity of work performed, (b) span of influence exerted, and (c) time horizon for achieving goals and objectives. Table 2.1 presents examples of Army leader requirements at each SST level offered by a researcher from the Center for Army Leadership (Fallesen, 2006).

It is important to note that FM 6-22 does not include a mapping of specific positions to the different levels of leadership in the SST model. This omission reflects the SST assumption that situational demands often force officers to perform requirements more consistent with a higher (or lower) rank. That being said, information presented in Chapter 3 of FM 6-22 suggests that platoon leaders, company commanders, battalion staff officers, and battalion commanders typically operate at the direct level. Wong, Bliese et al. (2003) draw the same conclusion. For example, FM 6-22 states that direct leadership "*generally occurs in organizations where subordinates are accustomed to seeing their leaders all the time: teams and squads; sections and platoons; companies, batteries, troops, battalions, and squadrons,*"[2] while "*organizational leaders generally include military leaders at the brigade through corps levels*."[3] Placing the positions covered in this project at the direct level of leadership is consistent with the categorization offered by Markessini, Lucas, Chandler, and Jacobs (1994) (see Table 2.2), and the results reported by Steinberg and Leaman (1990), who found few differences in the ratings of task importance and frequency between captains, majors, and lieutenant colonels. Steinberg and Leaman did, however, find rating differences between lieutenants and captains, and between lieutenant colonels and colonels. The latter difference in ratings is consistent with the SST's identification of battalion commanders (O5) at the direct level of leadership and brigade commanders (O6) at the organizational level of leadership.

In considering the categorization offered by Markessini and his colleagues, the HumRRO project team questioned the appropriateness of applying it to the current Army leadership structure. Many significant events had occurred since the publication of their work, such as Donald Rumsfeld's initiative to transform the military (see Rumsfeld, 2002 for details) and the prolonged military operations in Iraq and Afghanistan. Of particular concern was the possibility that the requirements performed by a battalion commander who is deployed may be more consistent with the leader requirements at the organizational level than at the direct level. Accordingly, we reviewed Chapter 11 of FM 6-22 to ensure that we included major duties applicable to leadership at the organizational level, in addition to those applicable at the direct level.

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[2] From paragraph 3-35, page 3.7
[3] From paragraph 3-39, page 3.7

Table 2.1. Leader Requirements at the Direct, Organizational, and Strategic Levels

Requirement	Level		
	Direct	Organizational	Strategic
Influencing	Provide clear and concise mission intent	Establish and promulgate long-term vision, empower others	Lead change, shape institutions for future success
Extending	Identify sphere of influence in local relations	Influence across Joint Interagency, Inter-government and Multinational organizations (JIM)	Set conditions for shared leadership, build alliances
Communicating	Ensure shared understanding	Inspire through choice and approach of message	Symbolic themes, multiple-purpose messages
Modeling	Demonstrate physical and emotional courage	Openly use and encourage critical and creative thinking	Demonstrate international diplomacy
Achieving	Monitor, coordinate, and reward team results	Manage multiple priorities and resources, plan for contingencies	Encompass complexity, align goals to national interests
Preparing Self	Develop deeper awareness of self	Improve self-regulation, learn how to learn rapidly	Refine one's geo-political awareness
Developing Other	Conduct professional growth counseling	Set policy for organizational development	Identify needs of next generation of leaders
Climate	Set expectations for performance	Encourage fairness and openness, use mistakes as learning opportunities	Prioritize what's most important to the organizational climate

Note. From Fallesen, J. J. (2006, August). *Army Leader Characteristics for Full-Range Operations: Comment on FM 6-22 Army Leadership*. Paper presented at the Science of Learning Workshop, sponsored by Training and Doctrine Command and U.S. Army Research Institute, Hampton, VA.

Table 2.2. Army Functional Domains Mapped onto the Stratified Systems Theory

Time Span	Stratum	Functional Domain
		Strategic
20+ years	VII. Army	Operations in a nearly unbounded world environment. Identifies feasible futures, develops consensus on specific futures to create, and builds required resource bases for whole systems which can function in the environment.
10+ years	VI. CORPS	Conditions environment to be "friendly" to systems thus created. Creates a corporate culture and value system compatible with societal values and culture, to serve as a basis for organizational policies and climate.
		Organizational
5+ years	V. Division	At Stratum V, operates bounded open systems thus created, assisted by individual at Stratum IV in managing adaptation of those systems within the environment by modification / maintenance / fine tuning of internal processes and climate, and by oversight of subsystems.
2+ years	IV. Brigade	
		Direct
1+ year	III. Battalion	Runs face-to-face (mutual recognition or mutual knowledge) subsystems - units or groups engaged in specific differentiated functions but interdependent with other units or groups, limited by context and boundaries set with the larger system.
3+ months	II. Company	
	I. Platoon	

Note. From Markessini, J., Lucas, K. W., Chandler, N., & Jacobs, T. O. (1994). *Executive leadership: Requisite skills and developmental processes for the U.S. Army's civilian executives* (ARI Research Report 94-26). Arlington, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (Table 2, p. 6).

As a final step in developing the draft list of leadership MDs, we compared the MDs with the categories of *tacit knowledge for military leadership* (TKML) defined by Hedlund and colleagues (e.g., Hedlund, Antonakis, & Sternberg, 2002; Hedlund, Williams, Horvath et al., 1999a, b, c). Tacit knowledge refers to work-related knowledge and behaviors that are action-oriented, practical, and learned on one's own rather than through a formal training program (Sternberg, Wagner, Williams, & Horvath, 1995). Given that tacit knowledge is obtained without guidance from the organization, we felt it was possible that important aspects of the job may not be reflected in formal Army documents such as FM 6-22. Therefore, we mapped the categories of TKML for platoon leaders, company commanders, and battalion commanders reported by Hedlund, Williams et al. against examples of MDs derived from our review of FM 6-22, as shown in Tables 2.3, 2.4, and 2.5. Inspection of these tables demonstrates that our MD list does, in fact, capture TKML categories.

Table 2.3. Platoon Leader TKML Categories and Related Leadership Major Duties

Platoon Leader TKML Category	Related Major Duties based on FM 6-22
Motivating subordinates	Energize and motivate others toward mission accomplishment
Taking care of Soldiers	Demonstrate a concern for people and their well-being
Managing oneself	Demonstrate self-awareness and self-understanding
Establishing trust	Build and maintain working relationships
	Build trust in others outside the line of authority
Influencing the boss	Energize and motivate others toward mission accomplishment
Establishing credibility	Model the Army Values and Warrior Ethos
	Lead with confidence in adverse situations

Note. From Hedlund, J., Williams, W.M., Horvath, J.A., Forsythe, G.B., Snook, S., Wattendorf, J., McNally, J.A., ., Sweeney, P. J., Bullis, R. C., Dennis, M., & Sternberg, R.J. (1999b). *Tacit knowledge for military leaders: Platoon leader questionnaire* (Research Product 99-07). Arlington, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.

Table 2.4. Company Commander TKML Categories and Related Leadership Major Duties

Company Commander TKML Category	Related Major Duties Based on FM 6-22
Motivating subordinates	Energize and motivate others toward mission accomplishment
Taking care of Soldiers	Demonstrate a concern for people and their well-being
Managing oneself	Demonstrate self-awareness and self-understanding
Establishing trust	Build and maintain working relationships Build trust in others outside the line of authority
Influencing the boss	Energize and motivate others toward mission accomplishment
Communicating	Encourage open communications and diverse points of view Listen actively to others
Developing subordinates	Train and develop others Counsel, coach, and mentor others Facilitate the ongoing development of others
Directing/supervising subordinates	Establish and communicate professional standards Enforce performance requirements Prioritize, organize, and coordinate tasks for individuals, teams or other organizational units
Balancing mission and troops	Balance the requirements of mission with the welfare of followers
Cooperating with others	Build and maintain working relationships Foster effective teamwork and cooperation

Note. From Hedlund, J., Williams, W.M., Horvath, J.A., Forsythe, G.B., Snook, S., Wattendorf, J., McNally, J.A., Sweeney, P. J., Bullis, R. C., Dennis, M., & Sternberg, R.J. (1999a). *Tacit knowledge for military leaders: Company commander questionnaire* (Research Product 99-08). Arlington, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.

Table 2.5. Battalion Commander TKML Categories and Related Leadership Major Duties

Battalion Commander TKML Category	Related Major Duties Based on FM 6-22
Motivating subordinates	Energize and motivate others toward mission accomplishment
Taking care of Soldiers	Demonstrate a concern for people and their well-being
Managing oneself	Demonstrate self-awareness and self-understanding
Establishing trust	Build and maintain working relationships
	Build trust in others outside the line of authority
Developing subordinates	Train and develop others
	Counsel, coach, and mentor others
	Facilitate the ongoing development of others
Dealing with poor performers	Enforce performance requirements
	Counsel, coach, and mentor others
Protecting the organization	Identify and leverage opportunities to improve individual, group, and organizational performance
	Remove work barriers
Managing organizational change	Identify and adjust to external influences on the mission or organization

Note. From Hedlund, J., Williams, W.M., Horvath, J.A., Forsythe, G.B., Snook, S., Wattendorf, J., McNally, J.A., Sweeney, P. J., Bullis, R. C., Dennis, M., & Sternberg, R.J. (1999c). *Tacit knowledge for military leaders: Battalion commander questionnaire* (Research Product 99-09). Arlington, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.

Technical Major Duties

For technical MDs, we could not develop a single set of descriptors that might cover all possible variations across branches or levels, so we developed lists of Army-Wide technical MDs for each level, branch-specific technical MDs for platoon leaders in five branches, and branch-specific technical MDs for at least one company command position in three branches. We placed particular emphasis on developing technical MDs for platoon leaders and company commanders because virtually all Army officers spend time in these two positions, and they provide the earliest points at which officer job performance can be evaluated.

Army-Wide Technical MDs

We derived lists of Army-Wide technical MDs for platoon leaders and company commanders based on MDs developed for NCOs and entry-level officer positions in the Army O*NET project (Russell et al., 2008), supplemented by information provided by an expert consultant (Mr. Roy Campbell) who has extensive knowledge of Army officer performance requirements. Based on these sources, we expected the Army-Wide technical performance requirements of platoon leaders and company commanders to be very similar so we developed a

single list to cover MDs for both levels. For the battalion XO, battalion S3, and battalion commander technical MDs, our primary source documents were the *Commander's Battle Staff Handbook* (U.S. Army Research Institute, Fort Benning Field Unit, 2003), the *Battalion Commander's Handbook* (U.S. Army War College, 1996), and the *Brigade Staff Performance Analysis* project conducted by HumRRO in the 1990s (Ford & Campbell, 1997). We acknowledge that these documents were primarily written from the perspective of MFE branches (formerly Combat Arms), so some of the MDs may be less relevant to officers performing battalion staff duties in other types of battalions. Nevertheless, we believe that these lists cover primary duty assignments for a large percentage of the active duty battalion S3 and battalion XO officers, as well as battalion commanders.

Branch-Specific Technical MDs

As noted above, we drafted branch-specific technical MDs for five branches, focusing primarily on the platoon leader and company commander levels. We did not develop branch-specific technical MDs for battalion staff officers or for battalion commanders. Doing so was beyond the scope of this project.

When developing technical MDs for each branch, we planned to use an approach that has worked very successfully in the past: (a) developing draft MDs based on available documentation from Army sources and (b) review of the draft MDs by Army SMEs. Historically, we have conducted the activities in this order for two reasons. First, SMEs find it much easier to react to descriptions of job duties than to generate such descriptions from scratch. They can readily identify descriptions that are inaccurate or incomplete, but find it much more difficult to articulate all of the different duties that they perform. Second, this approach minimizes the amount of Army SME time required to produce the lists with the side benefit of minimizing the amount of contractor labor and travel to obtain the SME input.

In this project, we started by searching for information about each branch, for example, how positions are arrayed across the Army's organizational structure, the approximate number of officers assigned to the branch, and the various types of duty assignments (positions) that occur within the branch. Appendix A documents information about the officer branch assignment process. As we expected, this search revealed significant variability in job duties within the Signal, Quartermaster, and Transportation branches. Therefore, within these branches, we attempted to identify two to three of the most highly populated duty assignments, with the goal of drafting MDs for those assignments.

After deciding on the specific duty assignment(s) within a branch, we next searched for documentation that would allow us to derive performance requirements. We typically use a number of sources for this purpose including field manuals, training materials and exercises, Soldier Training Publications (STPs), official Army websites (e.g., www.us.army.mil), and Army-related websites (e.g., ww.armytoolbag.com). In fact, we already had this type of information available from the Army O*NET project (Russell et al., 2008) for enlisted MOS similar to four of the five officer branches included in this project.

When we began this project, we thought that locating doctrine for officer branches and levels would be similarly straightforward as locating it for enlisted MOS and levels. Officer

positions have their own STPs, often referred to as officer foundation standards (OFS) (e.g., STP 12-42B-OFS *Soldier's Manual and Trainer's Guide AOC 42B Officer Foundation Standards, Adjutant General Company Grade Officer, Personnel Systems Management Manual Ranks 2LT, 1LT and CPT*). However, a review of the Training and Doctrine Publications website showed that, of the 200 STPs listed, only 9 covered officer positions. This was a disappointing finding, but we hoped to fill in the gaps using the other sources described above.

We tackled the Armor and Infantry branches first, and found several Army manuals that could serve as a source for draft branch-specific technical MDs (e.g., ARTEP 17-237-10 *Mission Training for Tank Platoon*; Program of Instruction for Armor Basic Officer Leader Course [BOLC III]; FM 3-21.8 *Infantry Rifle Platoon and Squad*, FM 3-21.71 *Mechanized Infantry Platoon and Squad (Bradley)*, and ARTEP 7-10-MTP, *MTP for the Infantry Rifle Company*), supplemented by MDs generated for senior NCOs in Armor and Infantry Military Occupational Specialties (MOS) (Russell, et al., 2008). We felt confident that Army SMEs would find the draft MDs to be, for the most part, an accurate representation of their duties. We noted that some duties would not necessarily be exclusive to a particular branch, but if they were important for that branch, we included them in our list. For example, a core part of both the Armor and Infantry branch (as well as some other branches) is moving equipment and troops into position. The specific equipment used to make these moves may differ across branches, and this information would be reflected in branch-specific knowledge requirements. At the MD level, the duties sound fairly similar across branches.

Next, we tackled the Signal, Quartermaster, and Transportation branches, and encountered (a) substantially more within-branch variability in duties than in the Armor and Infantry branches and (b) very little current documentation of duty requirements. Most of the information that we could find for these branches had been published more than 10 years ago and clearly no longer reflected the current force structure. In some instances, however, we found materials published within the past few years (e.g., a Signal Field Manual published in 2007), only to later learn that the transition to the modular, brigade-centric structure had rendered even these recent publications partially or entirely obsolete. For these branches, we started with the most up-to-date information that we could find for each branch and drafted MDs to the best of our ability based on these sources. Our goal was to develop at least a starting point for discussion with active duty officers. We knew that the MDs for these branches would require more updating and revision than the AW leadership and technical MDs, or the Armor and Infantry branch-specific MDs.

Table 2.6 shows the branch-specific MDs that we were ultimately able to draft. The Armor and Infantry MDs were vetted by a reasonable number of Army SMEs, and the Signal MDs were vetted by a small number of SMEs from the 63rd Expeditionary Sustainment Battalion (ESB). The Quartermaster and Transportation MDs have not been reviewed by Army SMEs and, given the difficulty locating current source materials, we are far less confident that SMEs will find them to be accurate representations of their duties. The branch-specific MDs for these three branches will likely require substantial revision before they can be used for operational purposes.

Summary

Using the sources and approach described above, we developed the following draft materials for review by Army SMEs:

- leadership MDs, inclusive of direct and organizational levels of leadership requirements;
- Army-Wide technical MDs for platoon leaders and company commanders;
- Army-Wide technical MDs for battalion S3s;
- Army-Wide technical MDs for battalion XOs;
- Army-Wide technical MDs for battalion commanders; and
- branch-specific technical MDs for five branches.

Table 2.6. List of Branch-Specific Technical Major Duties

Branch	Draft MDs
Armor	1. Tank Platoon Leader 2. Tank Company Commander 3. Cavalry Platoon Leader 4. Cavalry Troop Commander
Infantry	1. Infantry Platoon Leader 2. Infantry Company Commander
Signal	1. Signal Officer–Tactical Platoon Leader 2. Signal Officer–Strategic Platoon Leader 3. Signal Officer–Battalion S6 (Company Command equivalent)
Quartermaster	1. Supply Platoon Leader 2. Distribution Platoon Leader (Forward Support Company [FSC] in a BSB)
Transportation	Transportation Supply Platoon Leader

Chapter 3. Identifying Skills, Abilities, and Other Characteristics Required to Perform Officer Duties

Our goal in developing the list of skills, abilities, and other characteristics (SAOs) was to create a *comprehensive* list that tapped the major domains of human attributes (e.g., cognitive abilities, skills, temperament, and values), covering attributes likely to be related to officer performance at both the entry and higher levels, and to retention.[4] First, we integrated numerous prior efforts to delineate officer skill, abilities, and other characteristic (SAO) requirements, as well as research on leadership attributes conducted in both military and civilian settings (e.g. Day & Zaccaro, 2007; Yukl, 1998). We also used existing, well-researched taxonomies such as the U.S. Department of Labor's O*NET, the Cattell-Horn G_f-G_c model of intelligence (Horn & Noll, 1997), and Fleishman's taxonomy of ability requirements (Fleishman & Quaintance, 1987) to inform decisions about how to categorize and label the SAOs. We explicitly included skills related to leadership and management, skills that are likely learned post-accession. Ultimately, we categorized the SAOs into the following domains:

- Cognitive abilities
- Physical abilities
- Temperament
- Army values
- Communication skills
- Social/Interpersonal skills
- Self-Management skills
- Leadership skills
- Management skills
- Technical skills

Prior Studies of Officer Attributes

We examined several prior studies of leader attribute requirements. The studies varied in how comprehensively they covered the realm of human attributes and in their level of specificity. A member of our technical advisory team, Dr. Kenneth Pearlman, integrated seven studies that focused on Army officer and NCO leadership, with particular focus on the Army's current leadership manual, *Army leadership: Competent, confident, agile* (FM6-22; Department of the Army 2006), which is based on studies conducted by the Army's Center for Army Leadership (Horey et al., 2007; Keller-Glaze, Horey, & Fallesen, 2009). Figure 3.1 shows the raw material considered by Dr. Pearlman. We also reviewed a project conducted by the U.S. Air Force to identify officer attribute requirements (Agee, Shore, Alley, Barto, & Halper, 2009). The Air Force identified 54 abilities important for Air Force officers, divided into three broad categories: cognitive abilities, physical abilities, and interpersonal abilities.

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[4] We did not delineate knowledge requirements so we are not using the phrase "*knowledge,* skills, and abilities" (KSAs) in this report. The phrase "skills, abilities, and other characteristics" accurately reflects the type of attributes that we did identify. Identifying knowledge requirements was beyond the scope of this research.

Wong, Gerras, Kidd, Pricone, and Swengros (2003) identified six metacompetencies as underlying the strategic leadership necessary for the future Army, including identity, mental agility, cross-cultural savvy, interpersonal maturity, world-class warrior, and professional astuteness. The Wong, Gerras et al. (2003) report assumed that strategic competencies would be needed at the brigade command level and higher, and also noted that the competencies do not magically appear when an officer reaches the O6 level. The Army must help provide developmental experiences and training throughout an officer's career. Scales (2009) strongly endorsed this notion, stating that junior leaders need to be given opportunities to develop strategic as well as tactical skills.

Wong and his associates (Wong, Gerras et al., 2003; Wong, 2004) point out that several independent efforts to identify leader attributes critical for performing in the current and future military context reached essentially the same conclusion: At the broadest level, the two most critical attributes are leader self-awareness and adaptive capacity. Several recent publications make the same point, namely, that today's Army leaders must be able to apply critical thinking skills to adapt to rapidly changing situations and situations that the officer may have never encountered before (e.g., *The Army Capstone Concept, Operational Adaptability: Operating Under Conditions of Uncertainty and Complexity in an Era of Persistent Conflict 2016-2028,* published by the Department of the Army in December 2009 and *The U.S. Army Concept for the Human Dimension in Full Spectrum Operations* published by the Department of the Army in 2008). Pulakos and colleagues have extensively researched *adaptive performance* (Pulakos, Arad, Donovan, & Plamondon, 2000). They identified different types of adaptive performance, such as handling emergencies and crises, dealing with uncertain and unpredictable work situations, demonstrating cultural adaptability, and demonstrating physically oriented adaptability. Different types of adaptive performance require different types of underlying attributes. We incorporated a number of underlying attributes important for different types of adaptive performance into the SAO list, including behavioral flexibility, openness, cultural awareness, and physical strength/endurance.

In a project focusing on Air Force officers, Lentz et al. (2009) identified 10 constructs that show high potential for helping the Air Force identify strong officer candidates. This project focused on noncognitive constructs that could potentially be measured prior to officer accession. Their list included dutifulness/integrity, social competence, self-control, leadership orientation, learning orientation, achievement, dependability, perceptiveness/depth of thought, adaptability/flexibility, and innovation. These constructs are consistent with those identified in prior studies of Army officer performance, and we included all of them in our SAO list, although our labels may differ or they may be arrayed somewhat differently than in the Lentz et al. (2009) report.

FM6-22	OCS SOP	OCS SOP (cont'd.)	LAP	Leader Azimuth Check II
Attributes 1. A leader of character • Army values • Empathy • Warrior ethos 2. A leader with presence • Military bearing • Physically fit • Composed, confident • Resilient 3. A leader with intellectual capacity • Mental agility • Sound judgment • Innovation • Interpersonal tact • Domain knowledge Core Leader Competencies *Leads* • Leads others • Extends influence beyond the chain of command • Leads by example • Communicates *Develops* • Creates a positive environment • Prepares self • Develops others *Achieves* • Gets results	Army Values • Loyalty • Duty • Respect • Selfless Service • Honor • Integrity • Personal Courage Attributes *Emotional* • Self control • Balance • Stability *Mental* • Will • Self Discipline • Initiative • Judgment • Self-Confidence • Intelligence • Cultural Awareness *Physical* • Health Fitness • Physical Fitness • Military Bearing Skills *Interpersonal* • Communicate • Supervise • Counsel (goal-oriented unit/individual planning) *Conceptual* • Critical Reasoning • Creative Thinking • Reflective Thinking • Ethical reasoning	*Technical* • Know Equipment • Operate Equipment *Tactical* • Know Doctrine • Field Craft • Tactical Skills and Training Actions *Influencing* • Communicate • Decide (incl. problem solving, executing, and evaluating results) • Motivate *Improving* • Develop People • Build teams • Learn from Experience *Operating* • Planning • Preparation • Executing • Assessing	Communication Skills • Oral Communication Skill • Written Communication Skill • Oral Presentation Skill Interpersonal Skills • Sensitivity • Influencing Others Personal/Motivational Skills • Initiative Administrative Skills • Planning and Organizing • Delegation • Administrative Control Decision-making Skills • Problem Analysis • Judgment • Decisiveness Technical Skills • Technical Competence	• Communication • Decision Making • Motivating • Developing • Building (team building) • Learning (supporting a learning organization) • Planning and Organization • Executing • Assessing • Respect • Selfless Service • Integrity • Emotional Stability
		NCO21	**DA FORM 6285**	**NCO LSI Scales**
		• General Cognitive Ability (including analytic, creative, and practical components) • Integrity • Achievement Motivation • Judgment and Decision Making • Adaptability • Social Competence • Communication Ability • Emotional Stability/Stress Tolerance • General Self-Management Skill • Self-Directed Learning Skill • Knowledge of Battlefield Function Integration	• Initiative • Planning and Organizing • Influence • Judgment • Oral Communication Skill • Career motivation	• Tolerance for Ambiguity • Hostility to Authority (R) • Social Perceptiveness • Interpersonal Skill • Emergent Leadership • Conscientiousness • Self-Esteem • Empathy • Work Motivation • Adjustment • Agreeableness • Dependability (Non-delinquency) • Leadership (Dominance) • Physical Conditioning

Note. FM 6-22 = *Army Leadership: Competent, Confident, and Agile;* OCS SOP = *Officer Candidate School Standard Operating Procedures* (Department of the Army, 1 Nov 2007); NCO21 = Rumsey, Ford, Campbell, Campbell, Knapp, & Walker (1999); DA Form 6285 = Interview *Plan #2 Structured Interview, Army Precommissioning Selection, College Background and/or Military Service* (Department of the Army); LAP = *Leadership Assessment Program* (Rogers, Lilley, Wellins, Fischl, & Burke, 1982); Leader Azimuth Check II (Zaccaro, Klimoski, & Boyce, 1999 and Zaccaro, Klimoski, Boyce, Chandler, Banks, & Gade (1999); LSI Scales = *Noncommissioned Officer Leadership Skills Inventory Scales and Definitions* (Horgen et al., 2006).

Figure 3.1. Attributes listed in prior studies of Army officer and NCO requirements

Other Attributes Related to Officer Performance

Motivation to Lead

There is research support for a multidimensional "motivation to lead" (MTL) individual differences construct, both in its original 3-component form (Chan, 1999; Chan & Drasgow, 2001; Chan, Rounds, & Drasgow, 2000) and in an expanded 5-component form (Amit, Lisak, Popper, & Gal, 2007). Both formulations were developed and/or validated within military samples (Singapore military recruits, Israeli Defense Forces). According to Chan and Drasgow (2001):

> Individual differences in MTL may interact with the person's vocational or life-domain interests and abilities to predict leadership behaviors (e.g., participation in leadership roles and training) within a specific domain of work or life activity. This approach assumes that individual differences in MTL can change with leadership experience and training and are an immediate outcome of one's leadership self-efficacy and accumulated leadership experience. The latter are in turn affected by sociocultural values, personality, and acquired social skills and knowledge for leading. (p. 482)

We included the MTL construct in the SAO list, placing it in the temperament domain because it seems to fit better there than in other domains, but we would not argue that it is exclusively a temperament construct.

Situational Awareness

Situational awareness is often viewed as an important capability in command and control environments, such as those encountered in the military. An issue of *Human Performance* (1995, Volume 3) was devoted to research on this construct. Endsley (1995) provides evidence that situational awareness is a measurable individual differences construct. It depends on basic cognitive processes such as working memory and attentional control. Salas, Prince, Baker, and Shresthra (1995) and Gorman, Cook, and Winner (2006) point out that situational awareness also occurs at the team level. At the team level, it may be treated as an outcome variable. We included situational awareness in our SAO list because it is often cited as important for military officers and because there is some evidence that it is an individual differences construct.

Communication Skills

Military job analyses and selection and classification research projects often identify communication skills as important for effective performance in enlisted (Knapp & Tremble, 2007; Waters et al., 2009) and officer jobs (Russell et al., 2010). Most of the prior studies listed in Figure 3.1 include communication skills, as do taxonomies of individual differences, such as O*NET. We included written communication, oral communication, and active listening in our SAO list.

Collective/Shared Leadership

Collective leadership has attracted significant theoretical and empirical interest in the organizational sciences. However, there is presently no agreed upon conceptual definition or model of collective leadership. Although multiple definitions have been proposed (Avolio, Jung, Murray, & Sivasubramaniam, 1996; Pearce & Sims, 2002), collective leadership generally refers to the situation where the leadership of a work team, group, or unit is distributed, and in some cases shared, across multiple members. As demonstrated by recent research (Hiller, Day, & Vance, 2006), collective leadership differs from existing definitions of organizational leadership in at least two ways:

- Collective leadership is focused on leading a group rather than leading individual employees, as characterized by vertical, dyadic leadership. Thus, the primary unit of analysis for measuring collective leadership is typically a work team, group, or unit, and not an individual team leader or leader-follower dyad.
- Collective leadership includes an understanding of the *process* or the *relations* among team members (Uhl-Bien, 2006) through which multiple members influence the team through downward, upward, and lateral communication rather than a stable set of behaviors or attributes that describe the team or individual team members in the aggregate.

Collective leadership may vary by the type of team in which it occurs. For example, groups of individuals from different services, government agencies, and even countries, may come together to perform brief yet critically important tasks that demand specialized skills and close collaboration (e.g., task force). The kinds of collective leadership functions that need to be performed and how best to perform them in a task force are likely to be different than those required for a platoon or squad. Task forces have become increasingly common in today's complex Army environment. Indeed, it is precisely such work groups that demand collective leadership, but the ephemeral nature of their work make the "team" in such cases hard to quantify.

Our project team debated whether collective leadership can be considered as a coherent set of skills on which individuals vary, that is, an individual differences variable that could be measured. As noted above, this concept focuses on units beyond the individual level. Nevertheless, it may be that individuals can develop certain skills that help them be more or less effective in most or all collective leadership situations. Because this construct seems to be highly relevant for the current and future Army operational environment, we decided to include "Shared Leadership" in our attributes list. We do not know if it is possible to measure this construct at the level of individuals in a manner that will be widely predictive across various types of collective leadership situations. We think it may be worth further study and, indeed, we are aware that the Army is conducting research on how to measure collective leadership (at least at the group level).

Work Values

The Army is an organization that lives by a core set of values, with very strong expectations that Soldiers, particularly officers, live and model the values. Given the emphasis on core values, it makes sense to include relevant work values in the SAO list. Values represent

the global beliefs that underlie peoples' attitudinal processes, serving as the foundation for the behaviors they engage in and the choices they make (Connor & Becker, 1994; Pinder, 1998). In the work context, these values represent the beliefs one has regarding his or her job and the work environment; typically these beliefs relate to his or her needs, priorities, and desires (Nord, Brief, Atieh, & Doherty, 1988; Pine & Innis, 1987). As such, work values can be assessed by examining the importance individuals place on various reinforcers that may or may not be supplied by the work environment (Dawis & Lofquist, 1984; Van Iddekinge, Putka, & Sager, 2005).

From a selection standpoint, work values can have many important consequences. In general, value congruence or fit among individuals can facilitate work performance, satisfaction, and commitment (O'Reilly, Chatman, & Caldwell, 1991), while the failure of the organization to provide the reinforcers deemed important by the individual can adversely impact commitment, performance, and satisfaction (Morrison & Robinson, 1997; Rousseau, 1995).

We included several Army core values in our SAO list. When screening candidates for officer training, it may be important to consider the extent to which their personal values mesh with these Army core values. Predictor measures of Person-Environment (P-E) fit have shown promise for predicting important outcomes in past and ongoing ARI research (Knapp, McCloy, & Hefner, 2004; Knapp & Tremble, 2007; Putka, Kilcullen, Tremble, Wasko, & Shaw, 2009; Russell & Tremble, 2009). Ingerick (2005) identified P-E fit measures as having great potential to enhance Air Force officer accession.

Work Interests

ARI research shows that measures of vocational interests can help predict performance and attrition in enlisted jobs (Campbell & Knapp, 2001; Knapp & Tremble, 2007), so it is reasonable to believe that interests may help predict these same outcomes in the officer ranks. As we noted with regard to work values, the utility of interests for predicting an outcome such as retention has to do with the *fit* between an officer candidate's basic work interests and the extent to which Army officer jobs fulfill those interests.

We found one study that specifically involved an Army officer candidate sample. Brown (1980) investigated the relationship between the Strong–Campbell Interest Inventory and completion of ROTC programs. In the 1980 study, Brown had advanced ROTC cadets (junior/senior year) and students who had disenrolled from the ROTC program at least 6 months prior complete the Strong-Campbell Interest Inventory (total $N = 49$ students). Five variables were found to significantly discriminate between current students and those who had disenrolled: (a) *Enterprising Theme,* (b) *Military Activities,* (c) *Army officer,* (d) *Dietician, and* (e) *Physical Scientist.* As a group, these five variables correctly identified 82.6% of advanced ROTC students and 87.5% of the dropouts, suggesting that interest measures might also be a viable means of predicting completion of an academic Army ROTC program. However, caution should be taken in interpreting these results as they are based on a very small sample size. We did not explicitly include interests in our SAO list because most military occupations fall within only one or two of the broad vocational interests in taxonomic models of interests (e.g., Holland's RIASEC model). We believe the Army could develop targeted *predictor* measures that capture more fine-grained differences in Army officer jobs, and that such measures could provide useful information for officer classification.

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Research Related to Retention

As noted in the introduction, a key outcome variable is officer retention. We reviewed past research that addresses the issue of retention at various points in a Soldier's career (e.g., Putka, 2009; Putka & Bradley, 2008; Ramsberger, Waters, & Strickland, 2006; Russell & Tremble, 2009; Strickland, 2005; Van Iddekinge, Putka, McCloy, & Strickland, 2004) to ensure our SAO list included attributes related to retention and work attitude variables shown in prior research to be related to Person-Environment (P-E) fit. P-E fit, in turn, is related to attrition and turnover.

ARI is currently evaluating the utility of a variety of noncognitive measures for predicting retention in officer training, as well as other outcomes of interest, such as student performance. One stream of research focuses on factors related to disenrollment from the ROTC scholarship program and the other stream of research focuses on performance during and attrition from OCS. In one recently completed project, ARI found that scores based on a battery of noncognitive predictors (affective, personality, values, and leadership judgment) were related to student affective commitment to the Army and to their career intentions (Russell & Tremble, 2009). The strongest predictors of these outcome variables were scales designed to measure the extent to which the student identifies with the Army. In addition, several measures of temperament characteristics, organizational commitment, and work values showed significant correlations with outcome measures of affective commitment and/or career intentions.

In a project focusing on predictors of ROTC disenrollment (Putka et al., 2009), a battery of noncognitive predictor measures was evaluated, in addition to measures of academic performance, as a potential predictor of disenrollment or self-rated beliefs about remaining in the Army. There is overlapping content between the noncognitive predictor battery used in this project and the battery used in the OCS project just described. The results of this project are consistent with those from the project involving OCS students. More specifically, scales such as Achievement Orientation, Army Identification, Fitness Motivation, Hostility to Authority, Self-Efficacy, and Stress Tolerance were related to self-rated beliefs and intentions about remaining in the Army. Army Identification, a measure of the extent to which a person endorses values similar to those of the Army culture, and Self-Efficacy were related to actual disenrollment.

ARI has also conducted research on the reasons that officers stay in or leave the Army using a survey approach (Lentz et al., 2010). The Officer Transition Survey (OTS) was administered as an exit survey to junior officers who were outprocessing and was also administered to proxy samples of experts and non-departing junior officers to determine if their insights were similar to those of officers who were actually leaving. This research did not address personal attributes related to the decision to stay or leave, but it does provide insight into the factors that motivate officers to stay or to leave. Length of deployments and the impact of Army life on family stability and family well-being strongly influenced decisions to leave the Army, while the opportunities to serve, to lead, and to work with fellow officers, Soldiers, and NCOs strongly influenced decisions to stay.

Finally, Card and Shanner (1976) identified several types of noncognitive variables, including values, needs, and interests, that contributed to predicting career commitment among ROTC Cadets and Army officers.

Personality

A great deal of recent research has examined the role of various elements of personality for predicting commissioning as an Army officer. For example, Klopp (2006) and Robbins, (2007) investigated the relationship between scales on ARI's Rational Biodata Inventory (RBI) and students' subsequent commissioning as Army officers. Those RBI scales that exhibited significant relationships with commissioning as an officer are presented in Table 3.1 (based on Robbins' [2007] re-analysis of Klopp's data).

Table 3.1. RBI Biodata Scales Significantly Correlated With Commissioning

Biodata Scale	R
Emergent Leadership	-.09
Interpersonal Skills/Diplomacy	-.09
Emotional Stability	.15
Hostility Toward Authority	-.09
Army Affective Commitment	.22

Note. $N = 647$. r = Point-biserial correlations between RBI scale scores (adjusted for Lie scale scores) and the retention criterion (0 = drop out and 1 = commissioned). All correlations are statistically significant ($p < .05$, one-tailed).

The results of Robbins' (2007) re-analysis indicate that several RBI scales were predictive of commissioning as an Army officer. Army Affective Commitment, Emotional Stability, and Hostility to Authority were significantly related to commissioning in a direction that was consistent with theoretical expectations (i.e., individuals higher in Army Affective Commitment and Emotional Stability were more likely to commission, individuals higher in Hostility to Authority were less likely to commission). In contrast, Emergent Leadership and Interpersonal Skills/Diplomacy, which one would expect to be *positively* related to commissioning, were found to have a significant *negative* correlation with commissioning.

Another example of the examination of personality variables in the prediction of officer retention is the work of Sümer (2004). Based on turnover literature from civilian samples/organizations and on the work completed by members of the NATO Task Group on Military Recruitment and Retention, Sümer outlined a model of military turnover, identifying various distal, mediating, and proximal variables expected to influence turnover in the military. Among the proximal variables were individual difference variables, including (a) Emotional Stability, (b) Agreeableness, (c) Negative/Positive Affect, and (d) Proactive Personality. In the model, the author argued that these specific factors will influence job satisfaction (both directly, and through a relationship with quality of life perceptions), which will, in turn, affect turnover intentions, and then subsequently, turnover behavior.

Although Sümer's (2004) model has not been directly tested in a military context, results from a 2008 meta-analysis (Zimmerman, 2008) are consistent with a variety of Sümer's propositions. For example, there was support that the individual differences identified by Sümer were both directly related to turnover (see Table 3.2), as well as indirectly related to turnover through a relationship with job satisfaction and turnover intentions. One exception was the relationship between Positive Affect/Extraversion and turnover, which had a true-score

correlation of -.04 and a credibility interval that included zero. Additionally, Proactive Personality was not examined in the meta-analysis, nor was Quality of Life as a mediating variable. As the studies that composed the meta-analysis were from a civilian (and not a military) context, these results may not be generalizable to the current effort's purpose.

Table 3.2. Meta-Analytic Results of Personality and Intentions to Leave and Turnover

Personality Variable	Intentions	Turnover	
	P	ρ_1	ρ_2
Emotional Stability	-.23	-.20	-.18
Agreeableness	-.13	-.27	-.25
Negative Affect[a]	.31	.20	.18
Positive Affect[b]	-.18	-.04	-.04

Note. ρ = estimated true-score correlation corrected for unreliability in the predictor and criterion, 95%, $\rho1$ = estimated operational validity corrected for range restriction in the predictor and turnover rates different than 50%, ρ_2 = estimated true-score corrected for unreliability in the predictor and turnover rates different than 50%.
[a] When examining the personality-turnover relationships (but not the personality-intentions relationships), effect sizes for Negative Affect and Emotional Stability were combined; therefore, the coefficients for the two constructs are identical and represent a combination of trait affect and personality. [b] When examining the personality-turnover relationships (but not the personality-intentions relationships), effect sizes for Positive Affect and Extraversion were combined; therefore, the coefficients presented represent a combination of trait affect and personality. Proactive Personality was not a variable examined in the project.

Another aspect of personality that may contribute to predicting officer retention is a concept introduced by Duckworth, Peterson, Matthews and Kelly (2007) as "grit." The authors define and describe grit as "perseverance and passion for long-term goals," and say that it "entails working strenuously towards challenges, maintaining effort and interest over years despite failure, adversity, and plateaus in progress." (p. 1087). This construct shares characteristics with self-control and conscientiousness. The authors contend that this construct is a universal prerequisite for leadership. Therefore, it may be worth considering Duckworth et al.'s measure of Grit as a predictor in future research efforts. We did not list Grit as a separate construct in our SAO list because we felt it was adequately represented in other constructs.

Work Attitudes

Finally, we identified several attitudes that relate to retention, as well as to other outcomes of interest for Army officers. Many of these attitudes have been studied extensively by military psychologists. For example, an entire issue of *Military Psychologist* was devoted to research on organizational commitment (see Gade, 2003 for an introduction to the special issue). The attitudes we discuss below are proximal predictors of work outcomes such as retention. As a result, they are often seen as mediators of the more distal SAOs (i.e., cognitive abilities, personality) typically included in models of Army leadership like the ACML presented in FM 6-22. We used the research on these variables to help ensure that our list included SAOs that could *predict* these work attitudes; we did not include the work attitudes themselves in the SAO list.

Organizational Commitment. Organizational commitment is often defined in terms of the three components proposed by Meyer and Allen (1991): affective, continuance, and normative commitment. Affective commitment refers to the degree to which one identifies with

and has an intrinsic interest in being a member of the organization.[5] Continuance commitment refers to the degree to which one's commitment to the organization is driven by the perceived costs of leaving, the quality of alternative job/career options, or the perceived importance of that organization to achieving one's ultimate career goal. Finally, normative commitment refers to the degree to which one feels an obligation to remain with the organization.

A meta-analysis by Meyer, Stanley, Herscovitch, and Topolnytsky (2002) suggests that all three types of commitment are negatively related to intention to leave and to turnover. Affective commitment also demonstrated fairly strong relationships with several other outcomes likely of interest to the Army, including positive relationships with attendance, performance, and organizational citizenship behaviors and negative relationships with work stress and work-family conflict. The results for normative and continuance commitment were less impressive for these other outcomes, although many of the relationships were significantly different from zero. Organizational commitment has been shown to relate to performance (e.g., O'Shea, Goodwin, Driskell, Salas, & Ardison, 2009) and turnover (e.g., Olsen & Heilmann, 2009; Riddel, 2010) in military contexts.

Job Satisfaction. Job satisfaction can be defined as the degree to which one is generally satisfied with the work, quality of supervision and relationships, pay, and opportunities for advancement on the job.[6] While job satisfaction is often considered in general terms (i.e., overall job satisfaction), it is influenced by a variety of factors including affect, cognitions, and behaviors (Weiss, 2002; Weiss, Nicholas, & Daus, 1999).

Research suggests that job satisfaction is related to a myriad of important work outcomes. For example, there is meta-analytic evidence linking job satisfaction to organizational citizenship behaviors (Organ & Ryan, 1995), turnover (Carsten, & Spector, 1987), and deviant work behaviors (Mount, Ilies, & Johnson, 2006). There is also evidence that job satisfaction is related to life satisfaction (Rode, 2004). The link between work and life satisfaction seems potentially relevant for the leadership MD labeled "Maintain mental health and well-being."[7]

Job Embeddedness. Job embeddedness refers to the degree to which one feels an attachment to people and activities associated with an organization (referred to as *links*), and the extent to which the demands of the organization match those from other aspects of one's life (referred to as *fit*), and the negative consequences of leaving the organization (referred to as *sacrifice*). Mitchell, Holtom, Lee, Sablynski, and Erez (2001) offered job embeddedness to help explain the fact that multiple considerations drive an individual's decision to stay with or leave an organization.[8] While many factors influence the degree of job embeddedness experience, research by Allen (2006) suggests that feelings of job embeddedness are stronger in organizations like the Army that place newcomers in collective learning situations.

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[5] Military researchers have used the term Army Identification as a surrogate for 'affective commitment.
[6] This definition incorporates the five scales on the *Job Description Index* (JDI; Smith, Kendall, & Hulin, 1969).
[7] The definition of this MD includes "Takes part in regular exercise, leisure activities, and time away from routine work. Stays focused on life priorities and values.
[8] Job embeddedness evolved out of *unfolding model of turnover* offered by Lee and Mitchell (1994) to address the fact that decisions to leave an organization can follow different pathways (e.g., individual who receive an unexpected and attractive job offer may follow a pathway that results in a relatively quick decision to leave the organization).

Given the evolution of this construct, it is not surprising that most of the research on job embeddedness has focused on relationships with turnover. Overall, this research suggests that job embeddedness is inversely related to turnover in nonmilitary organizations (e.g., Laio, Chuang, & Joshi, 2008; Lee, Mitchell, Sablynski, Burton, & Holtom, 2004; Mitchell et al., 2001). Moreover, the effect of job embeddedness remains significant even after controlling for other work attitudes such as job satisfaction and organizational commitment (see Lee et al., 2001, and Mitchell et al., 2001).

Finally, the results of a recent study by Burton, Holtom, Sablynski, Mitchell, and Lee (2010) suggest that individuals with high job embeddedness are more likely to adapt to adversity in the workplace. In the face of adverse work events, individuals with low job embeddedness tended to withdraw, while individuals with high job embeddedness tended to engage in more prosocial behaviors such as assisting coworkers.

Job Involvement. Job involvement refers to the degree to which one psychologically identifies with his or her job and views performance in the job as important to his or her self-worth (Kanungo, 1982; Lodahl & Kejner, 1965). Job involvement is similar to organizational commitment in that both constructs have affective components. The two attitudes differ in terms of the referents used to define self-identity (the job versus the organization). Blau and Boal (1987) hypothesized that job involvement and organizational commitment interact to predict important organizational outcomes. For individuals high in job involvement and organizational commitment (called "institutional stars"), turnover is considered dysfunctional. In contrast, for individuals low in both job involvement and organizational commitment (called "apathetic employees), turnover is considered functional. While there is some evidence to support the interactive effects of job embeddedness and organizational commitment on important work outcomes (e.g., Blau & Boal, 1989), others have reported nonsignificant effects (e.g., Huselid & Day, 1991).

There is some evidence that job involvement is related to job performance (e.g., Brown & Leigh, 1996; Diefendorff, Brown, Kamin, & Lord, 2002); however, a meta-analytic investigation suggests that the relationship between job involvement and in-role job performance is relatively weak (Brown, 1996). Research has also shown that job involvement is related to organizational citizenship behaviors (Diefendorff et al., 2002).

Evolution of the SAO List

Based on our review of the sources cited above, we created an initial list of 55 SAOs that seemed relevant for Army officers. We subjected this list to an early review by Army SMEs at Fort Campbell and then to several iterations of review by our internal project team, our technical advisory committee, and additional Army SMEs. Near the end of the project, we were also able to incorporate input from several lieutenant colonels and colonels attending the Army War College or the Industrial College of the Armed Forces at the National Defense University. We used input from the senior officers to help identify the relative importance of various SAOs for officers at different ranks. Their qualitative evaluations are shown in Appendix B. We believe these judgments would generally hold if empirical evaluations could be collected across a wide and representative range of Army officers, but obviously this is an empirical question.

Chapter 4: Review by Subject Matter Experts

After the draft lists of MDs and SAOs were developed, Army officers at various levels and from a variety of branches reviewed them. In the following sections, we describe our approach for obtaining officer review, as well as the results of that review.

Overview of Site Visits

Input on the lists was obtained from Army officers during site visits at the following Army posts:
- Fort Carson (December, 2009)
- Fort Campbell (January, 2010)
- Fort Knox (March, 2010)
- Fort Gordon (March, 2010)
- Fort Benning (March, 2010)
- Army War College (May 2010)
- Industrial College of the Armed Forces at the National Defense University (May 2010)
- Focus group with retired XOs and S3s conducted at HumRRO office in Louisville, KY (June 2010)

At the first two locations we expected to gain representation from each of the levels targeted in this project and from various officer branches. These visits occurred early in the project and we used the opportunity to help build leadership MD, Army-Wide technical MD, and SAO lists and to try out evaluation rating scales and instructions. At the middle three locations we expected to meet with officers attending the Captains Career Course. These officers had experience as platoon leaders. At Fort Gordon, we were also able to meet with officers from the 63rd ESB, part of the 35th Signal Brigade.

The next two sites are the Army's senior military educational institutions, which prepare high-level military personnel for senior leadership responsibilities. These two sites offered the opportunity to interview officers with experience as battalion commanders. Finally, because the site visits offered very limited opportunity to obtain SME input from XOs and S3s, a small focus group was conducted at HumRRO's Louisville office with two recently retired Army officers, each with experience as a battalion S3 and one with experience as a battalion XO.

The focus group protocol used for all but the battalion commander interviews can be found in Appendix M. While there were slight variations in the focus group protocols across locations, the general format was the same. The interview protocol for the battalion commanders appears in Appendix N.

Table 4.1 summarizes, across all site visits, the number of SMEs by rank who reviewed each of the lists. The table shows that the total number of reviewers was 180, with the vast majority of those reviewers coming from the Captain rank.

Table 4.1. Number of SMEs Who Reviewed Descriptor Lists across All Sites

Grade	SAOs	Leadership MDs	PL/CC AW Technical MDs	PL/CC Branch-specific Technical MDs	BN S3 Technical MDs	BN XO Technical MDs	BN Cdr Technical MDs
O1/O2	12	20	20	6	0	0	0
O3	136	143	143	75	0	0	0
O4	6	9	8	2	4	1	0
O5	1	3	1	0	2	1	2
O6	5	5	0	0	0	0	5
Total	172	180	172	83	6	2	7

Note. All SMEs provided qualitative evaluations of the lists; only a subset provided quantitative evaluations. PL=platoon leader; CC=company commander; BN=battalion.

Review of Draft MD and SAO Lists

Building the Lists

The focus of the first site visit was to obtain SME input on our preliminary drafts of the leadership MD and Army-Wide technical MDs lists for platoon leaders and company commanders. Because this was the first time the lists were reviewed by SMEs, we collected only qualitative input. Twenty officers reviewed the lists: 8 O2s, 7 O3s, and 5 O4s. The number of SMEs by rank who reviewed and provided feedback on each MD list are presented in Table 4.2. All of the officers came from the 2nd Heavy BCT and had recently returned from deployment to Iraq. Several officer branches were represented including Engineering, Military Police, Military Intelligence, Infantry, Armor, Transportation, and Field Artillery. The brigade was re-setting and, as a consequence, many of these officers were new to their positions.

Table 4.2. Number of SMEs Providing Qualitative Input on Draft MD Lists

Grade	Leadership MDs	PL/CC AW Technical MDs	BN S3 Technical MDs	BN XO Technical MDs
O2	8	8	0	0
O3	7	7	0	0
O4[a]	4	3	3	0
O5[b]	0	0	0	0
Total	19	18	3	0

[a] Five O4s were scheduled for individual, one-hour interviews. Due to time limits, however, the O4s did not review every list. None of the O4s had battalion XO experience; consequently, no reviews of the XO technical MD list were obtained at this site.
[b] No O5s were available to participate at this site.

The SMEs were instructed to read each MD title and its definition. We then asked them to provide:

- Suggestions for more appropriate, accurate, or up-to-date wording
- Suggestions for additional examples to include in the MD definitions
- Input on whether MDs are, indeed, Army wide
- Feedback on whether the technical MD list for platoon leaders and company commanders was relevant for each position

Majors were asked to review the Army-Wide technical MD lists targeted for platoon leaders and company commanders given their prior experience in those roles. However, lower ranking officers were not asked to review and provide feedback on the lists for higher ranking positions (e.g., first lieutenants were not asked to review the battalion S3 list) due to their lack of experience in those roles.

Overall, the SMEs indicated that the MD lists were appropriate descriptors of the leadership requirements of their jobs. They also confirmed that the Army-Wide technical MD list was appropriate for both platoon leaders and company commanders. The most common type of feedback was to make changes to the verbs used in the definitions of the Army-Wide technical MDs. For a few MDs, the SMEs indicated that the wording was more appropriate for enlisted personnel than for officers. For example, in the platoon leader/company commander Army-Wide technical MD list, the SMEs recommended that we revise "Conduct operator maintenance" to "Supervise operator maintenance." Similarly, for the battalion S3 technical MD list, the SMEs informed us that the abbreviation "R & S" has been replaced by "ISR" (intelligence, surveillance, and reconnaissance). Such revisions were implemented based on SME input and in conjunction with review by HumRRO project staff and a project team member with extensive Army experience. The SMEs did not suggest dropping any of the MDs or adding any new ones, indicating that they felt the lists, in general, were quite relevant and comprehensive.

Rating Scale Try-out

In our second site visit, 36 officers participated in focus groups: 4 O2s, 27 O3s, 4 O4s, and 1 O5. Table 4.3 presents the number of SMEs by rank who reviewed and rated each list. At this site, the 159th Combat Aviation Brigade was tasked to provide SMEs. As a consequence, these SMEs are perhaps not as representative of Army officers in general as we would have hoped, given that Aviation is one of the smaller Army officer branches. In fact, because the O4s in the sample represented the Aviation Branch, we did not ask them to review the technical MDs for the battalion XO or S3 positions because we felt their evaluations would not be representative of most battalion XO and S3 positions. The following branches were represented in the second site visit: Aviation (70%), Medical Service, Military Intelligence, Military Police, Ordnance, Quartermaster, Signal, and Transportation.

The primary focus of this site visit was to try out a scale for collecting quantitative ratings on the leadership and Army-Wide technical MDs and to get input on the draft SAO list. In particular, SMEs were asked to use a 5-point Likert scale to rate the importance of each SAO and each MD where 1 = not important, 2 = somewhat important, 3 = important, 4 = very important, and 5 = extremely important. In addition, SMEs were asked to use a 7-point scale to rate the frequency with which they performed each of the Army-Wide technical MDs; this scale ranged from 1 = once in 1 to 2 years to 7 = several times per hour. Only the Army-Wide technical MDs were rated on a frequency scale as we expect that the frequency of performance on technical work activities might meaningfully differentiate officer branches, which may be helpful for officer assignment purposes. SMEs were also given an opportunity to provide a "not applicable" rating for each of the descriptors. If SMEs indicated "not applicable" when rating the importance of a technical MD, then, by default, the frequency rating for that technical MD was also coded as

"not applicable." All "not applicable" ratings were coded as missing prior to computing means and standard deviations.

Table 4.3. Number of SMEs Providing Try-Out Ratings on Draft Descriptor Lists

Grade	SAOs	Leadership MDs	PL/CC AW Technical MDs	BN S3[a] Technical MDs	BN XO[a] Technical MDs
O2	4	4	4	0	0
O3	27	27	27	0	0
O4	4	3	3	0	0
O5[b]	1	1	1	0	0
Total	36	35	35	0	0

[a] The battalion S3 and battalion XO technical MD lists were based on the Commander's Battle Staff Handbook, which is primarily intended for maneuver unit MDs; therefore, we decided not to ask the battalion S3 or battalion XO from a Combat Aviation Brigade to review the battalion XO/S3 technical MD lists.
[b] The O5 participant opted to engage in a general discussion of officer performance, rather than provide quantitative ratings on each of the lists.

The SMEs were asked to provide feedback on the same types of questions that were posed during our first site visit In general, they agreed with the appropriateness of having one list of Army-Wide technical MDs to describe technical work activities of platoon leaders and company commanders. The SMEs also added one technical MD to the platoon leader/company commander list and suggested several wording changes in the leadership MD and SAO lists. The SMEs were also asked to provide input about the appropriateness of the instructions for making ratings and the appropriateness of the rating scale itself. Most of the SME feedback was directed at the rating task, specifically the frame of reference that we attempted to use in the instructions. We had hoped to achieve ratings that were not theater-specific and thus could generalize across assignment types. The SMEs indicated that it was extremely difficult to make such generalizations, given that the importance of the performance requirements and the frequency with which they perform the technical MDs varies considerably depending on their assignment, and also on whether they are deployed or are in garrison. Based on this SME input, the rating instructions were revised for subsequent data collections such that SMEs were instructed to make ratings, "from the perspective of your last/current TO&E unit assignment," with the addition of a question about that assignment, so it would be possible (with sufficient sample size) to compare ratings by assignment type.[9] In addition, we revised the frequency scale such that the bottom two anchors and the top two anchors were collapsed. This change was made because virtually no SMEs used the extreme values on the frequency rating scale.

Due to the changes in the rating instructions, the rating scale, and the content of the MD and SAO lists after the second site visit, we did not combine the quantitative ratings collected at this site with those collected at later sites. The descriptive statistics gathered at this site are displayed in Appendices O (SAOs), P (leadership MDs), and Q (platoon leader/company commander Army-Wide technical MDs), respectively. All of the SMEs, regardless of their current rank, were instructed to make their ratings based on their experience as either a platoon leader or a company commander (whichever was most recent). Consequently, the means and standard deviations reflected in the tables in Appendices O-Q reflect evaluations for the platoon leader/company commander level.

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[9] A table of organization and equipment (TO&E) unit assignment is directly related to combat or combat support.

In this preliminary evaluation of the SAO list, the SAO (see Appendix O) with the highest importance rating was, "Integrity" ($M = 4.74$, $SD = 0.51$), followed by "Conscientiousness," "Motivating Others," and "Leadership," all of which received mean importance ratings of 4.66. The lowest rated SAO was, "Quantitative Abilities" ($M = 2.89$, $SD = 0.87$). Only one SME provided a "not applicable" rating for one SAO: "Empathy." All other SAOs were rated as applicable by all of the SMEs at this site.

The leadership MD (see Appendix P) with the highest importance rating was, "Lead with confidence in adverse situations" ($M = 4.75$, $SD = 0.50$) followed by, "Model the Army Values and Warrior Ethos" ($M = 4.67$, $SD = 0.59$). The leadership MD with the lowest importance rating was, "Develop and maintain geopolitical awareness" ($M = 2.97$, $SD = 1.06$). None of the leadership MDs received a "Not applicable rating" from the SMEs at this site.

Finally, the platoon leader/company commander Army-Wide technical MD (see Appendix Q) that received the highest importance rating was, "Perform combat lifesaving and evacuation" ($M = 4.59$, $SD = 0.74$) followed by "Maintain situational awareness and respond to threats" ($M = 4.52$, $SD = 0.76$). The most frequently performed platoon leader/company commander Army-Wide technical MD was, "Perform administrative, record keeping and correspondence requirements" ($M = 5.00$, $SD = 1.30$). The platoon leader/company commander Army-Wide technical MD with the lowest importance rating was, "React to NBC hazards" ($M = 2.38$, $SD = 1.10$); this was also rated as the least frequently performed platoon leader/company commander Army-Wide technical MD ($M = 1.24$, $SD = 0.50$). The Army-Wide technical MDs for platoon leaders/company commanders received substantially more "Not applicable" ratings than the other descriptor lists. This finding makes sense, particularly in light of the fact the majority of SMEs were Aviation officers. The type of Army-Wide technical MDs receiving the highest percentage of "not applicable" ratings were work activities such as, "Operate combat vehicles" and "Conduct mounted obstacle breaching," that is, ground-based activities. Clearly, these ratings suggest that some of the Army-Wide technical duties are not, in reality, *Army wide.* However, we believe and officers indicated that most of these technical duties are considered part of the officer's common training and most or all officers are expected to be able to perform them, even though some officers perform them very infrequently.

Quantitative Review of SAO and Leadership/Army-Wide Technical MD Lists

As noted earlier, five officer branches were targeted for this project: Armor, Infantry, Signal, Quartermaster, and Transportation. We visited the Maneuvers Captains Career Course at Fort Knox and Fort Benning, with the goal of getting input from officers in the Armor and Infantry branches. We also visited the Signal Captains Career Course at Fort Gordon. As expected, we found that most of the officers attending the Captains Career Courses were from the target branches but we also found that officers from other branches were also in attendance. At Fort Gordon, we also met with officers from the 63rd ESB. Table 4.4 displays the number of SMEs by rank who reviewed and rated each list at these three posts.

The primary focus of these site visits was to collect (a) quantitative ratings from SMEs on the revised SAO, leadership MD, and Army-Wide technical MD lists, primarily from officers with experience as a platoon leader, and (b) qualitative reviews of branch-specific technical MDs for the Armor, Infantry, and Signal branches.

Table 4.4. Number of SMEs Providing Ratings on SAO and MD Descriptor Lists

Location/Grade	SAOs	Leadership MDs	PL/CC AW Technical MDs	PL/CC Branch-specific Technical MDs	BN S3 Technical MDs	BN XO Technical MDs	BN Cdr Technical MDs
Fort Knox							
O2	1	1	1	0	0	0	0
O3	61	61	61	46	0	0	0
Fort Benning							
O3	30	30	30	16	0	0	0
Fort Gordon							
O1/O2	7	7	7	6	0	0	0
O3	18	18	18	13	0	0	0
O4	2	2	2	2	1	1	0
O5	1	1	0	0	0	0	1
Total	120	120	119	83	1	1	1

Note. The exclusive focus of the Fort Knox and Fort Benning site visits was to collect input from officers attending the Maneuver Captains Career Course. The officers at these branches all had experience as platoon leaders, but not in higher level positions. Therefore, none of these officers were asked to provide ratings on the battalion S3, battalion XO, or battalion commander lists. Only the small subset of officers from the 63rd ESB at Fort Gordon had experience at the battalion staff or battalion command levels.

Tables 4.5, 4.6, and 4.7 contain the means and standard deviations for SAOs, leadership MDs, and platoon leader/company commander Army-Wide technical MDs, respectively. While most of the SMEs were captains with experience as platoon leaders, all of the SMEs were instructed to rate the platoon leader/company commander Army-Wide technical MDs, leadership MDs and SAOs from the perspective of a platoon leader/company commander. Therefore, we report the results combined across all raters. Raters used the following rating scales:

- Use the following scale to rate each MD/SAO on Importance:
-

> How important is this MD/SAO for performance as a platoon leader/company commander? Please answer this question from the perspective of your last/current TO&E unit assignment.
>
> 1 = Not Important
> 2 = Somewhat Important
> 3 = Important
> 4 = Very Important
> 5 = Extremely Important
> 6 = Not Applicable

Because the MDs lists are based on Army doctrine such as FM 6-22, we knew that most of them are likely to be at least somewhat important for most officers; otherwise, they would not appear in leadership doctrine and manuals. Therefore, we developed an importance scale that would help identify the *relative* importance of various MDs. This type of information will be useful in the event it is necessary to prioritize MDs, for example, for inclusion in a criterion development plan.

- Use the following scale to rate each technical MD on *Frequency*:

> How frequently do platoon leaders/company commanders perform this MD? Again, please answer this question from the perspective of your last/current TO&E unit assignment.
>
> 1 = Four times a year or less
> 2 = Once or twice a month
> 3 = Once or twice a week
> 4 = Once or twice a day
> 5 = Once an hour or more
> 6 = Not Applicable

If SMEs rated a technical MD as "Not applicable" on the importance rating scale, the frequency rating for that technical MD was also coded as "Not applicable." We coded "not applicable" responses as "missing" prior to computing means and standard deviations. In other words, the means and standard deviations in Tables 4.5, 4.6, and 4.7 are based on ratings provided by officers who felt the SAO or MD was applicable to their job. As expected, most MDs and SAOs were judged important, but there was variability in relative importance.

The standard deviations on the descriptor lists were generally less than 1.0, reflecting a reasonable amount of agreement among the officers. The standard deviations tended to be slightly higher on the frequency scale for the technical MDs, as would be expected, given that there is likely variation across branches in how frequently some of the MDs are performed.

The descriptive statistics for the SAOs are displayed in Table 4.5. "Situational Awareness" received the highest importance rating, followed by "Integrity." "Integrity" was also the highest rated SAO by officers who reviewed the draft SAO list (Site Visit 2). ("Situational awareness" did not appear on the list of SAOs presented to SMEs at this site.) The SAO that received the lowest importance rating was, "Quantitative Reasoning," which was also the lowest rated SAO by SMEs at Site Visit 2. Note that very few SMEs indicated that any of the SAOs were "Not applicable."

Table 4.5. Descriptive Statistics on SAOs for Platoon Leaders/Company Commanders provided by SMEs at Forts Knox, Benning and Gordon, Ranked by Importance

SAO	Importance (1 – 5)		% Rated NA
	M	SD	
1. Situational Awareness	4.74	0.58	3.4
2. Integrity	4.66	0.56	3.4
3. Loyalty	4.62	0.64	3.4
4. Judgment and Decision Making	4.57	0.58	2.5
5. Attentiveness	4.53	0.66	0.8
6. Verbal Reasoning	4.48	0.69	2.5
7. Conscientiousness	4.47	0.65	1.7
8. Problem Solving	4.46	0.64	3.4
9. Emotional Stability	4.45	0.68	1.7
10. Physical Courage	4.45	0.67	0.8
11. Planning and Organizing	4.44	0.64	1.7
12. Initiative	4.39	0.68	2.5
13. Motivation to Lead	4.36	0.77	0.8
14. Directing and Supervising Others	4.35	0.72	1.7

Table 4.5. (Continued)

SAO	Importance (1 – 5)		% Rated
	M	*SD*	NA
15. Adaptability	4.31	0.77	0.8
16. Respect	4.28	0.80	1.7
17. Duty	4.23	0.78	3.4
18. Team Orientation	4.22	0.81	0.8
19. Oral Communication	4.21	0.71	0.8
20. Memory	4.19	0.74	0.0
21. Training and Developing Others	4.18	0.71	0.8
22. Coordinating	4.18	0.70	0.0
23. Self-Efficacy	4.18	0.79	0.0
24. MOS Specific Knowledge and Skills	4.17	0.97	0.0
25. Spatial Orientation	4.16	0.77	0.8
26. Motivating Others	4.16	0.82	0.8
27. Military Bearing	4.16	0.87	0.8
28. Delegating	4.15	0.75	0.8
29. Achievement Motivation	4.13	0.76	0.8
30. Health and Fitness Orientation	4.12	0.80	0.8
31. Team Building	4.12	0.78	0.0
32. Selfless Service Orientation	4.11	0.88	0.8
33. Physical Endurance	4.09	0.85	0.0
34. Self-Management	4.08	0.77	0.8
35. Common Task Knowledge and Skills	4.07	0.88	0.0
36. Self-Directed Learning	3.97	0.82	0.0
37. Active Listening	3.96	0.75	0.0
38. Shared Leadership	3.95	0.83	0.0
39. Physical Strength	3.91	0.87	0.0
40. Traditional Values	3.90	0.91	1.7
41. Relationship Building	3.87	0.84	0.0
42. Learning Orientation	3.87	0.83	0.0
43. Social Perceptiveness	3.84	0.83	0.0
44. Written Communication	3.83	0.76	0.0
45. Innovation	3.82	0.83	0.0
46. Perceptual Speed and Accuracy	3.79	0.85	0.8
47. Cultural Awareness	3.77	0.81	0.0
48. Spatial Visualization	3.76	0.98	0.8
49. Openness	3.71	0.86	0.0
50. Psychomotor Ability	3.69	1.02	0.0
51. Perspective Taking	3.58	0.95	0.0
52. Social Sensitivity	3.54	0.91	0.0
53. Behavioral Flexibility	3.49	1.00	0.0
54. Coordination and Balance	3.31	1.02	0.0
55. Quantitative Reasoning	3.29	0.96	0.0

Note. *n* = 120. Importance rated on 5-pt Likert scale where 1=Not Important; 3 = Important; 5=Extremely Important. All "not applicable" coded as missing prior to computing means and standard deviations.

For the leadership MDs (see Table 4.6), the MD with the highest importance rating was, "Lead with confidence in adverse situations," which was also the leadership MD receiving the highest importance rating from SMEs who provided ratings on the draft leadership MD list. The next highest rated leadership MD was, "Establish mission goals and objectives." The two leadership MDs that received the lowest importance ratings were, "Resolve conflict through consensus-building and negotiation" and "Develop and maintain relevant geopolitical awareness." These were also the two leadership MDs receiving the lowest importance ratings

from SMEs who provided ratings on the draft list of leadership MDs. Again, very few SMEs indicated that leadership MDs were not applicable.

Table 4.6. Descriptive Statistics on Leadership MDs for Platoon Leaders/Company Commanders Provided from SMEs at Forts Knox, Benning and Gordon, Ranked by Importance

MD Title	Importance (1 – 5)		% Rated NA
	M	*SD*	
1. Lead with confidence in adverse situations	4.80	0.44	1.7
2. Establish mission goals and objectives	4.64	0.59	0.8
3. Execute plans to accomplish the mission	4.57	0.72	1.7
4. Model the Army Values and Warrior Ethos	4.45	0.82	1.7
5. Empower subordinates to exercise initiative and take ownership over work	4.44	0.73	1.7
6. Train and develop others	4.42	0.72	1.7
7. Enforce performance requirements	4.38	0.73	0.0
8. Counsel, coach, and mentor others	4.33	0.75	0.8
9. Foster effective teamwork and cooperation	4.33	0.71	0.8
10. Energize and motivate others toward mission accomplishment	4.32	0.81	0.8
11. Use information appropriately and effectively	4.30	0.79	0.8
12. Establish and communicate professional standards	4.28	0.75	0.0
13. Maintain mental health and well-being	4.25	0.82	0.8
14. Identify, obtain, allocate, and manage resources	4.25	0.77	0.0
15. Monitor and evaluate operational effectiveness	4.19	0.79	0.0
16. Demonstrate a concern for people and their well-being	4.19	0.81	0.0
17. Identify and adjust to external influences on the mission or organization	4.14	0.78	0.0
18. Balance the requirements of mission with the welfare of followers	4.13	0.89	0.8
19. Demonstrate conceptual, analytic, and evaluative skills to others	4.13	0.88	0.0
20. Demonstrate self-awareness and self-understanding	4.13	0.83	0.0
21. Expand knowledge of technical, technological, and tactical areas	4.11	0.91	1.7
22. Prioritize, organize, and coordinate tasks for individuals, teams or other organizational units	4.10	0.84	2.5
23. Effectively deal with reasonable setbacks and failures	4.02	0.83	0.0
24. Identify and leverage opportunities to improve individual, group, and organizational performance	4.02	0.85	0.0
25. Listen actively to others	4.00	0.88	0.0
26. Build trust in others outside the line of authority	3.98	0.95	0.0
27. Facilitate the ongoing development of others	3.98	0.78	0.0
28. Build and maintain working relationships	3.97	0.96	1.7
29. Engage in self-development activities	3.92	0.89	0.8
30. Expand conceptual and interpersonal capabilities	3.91	0.96	0.0
31. Make decisions that reflect an understanding of sphere of influence	3.89	1.00	0.0
32. Assess current developmental needs of others	3.88	0.81	0.0
33. Create a fair and inclusive work environment	3.88	0.97	0.0
34. Create and disseminate a vision of the future	3.86	0.92	0.0
35. Demonstrate cultural sensitivity in communication	3.83	0.89	0.0
36. Remove work barriers	3.81	0.93	0.8
37. Develop and maintain cultural awareness	3.79	0.95	0.0
38. Account for individual and group capabilities and commitment to task	3.74	0.87	0.8
39. Encourage open communications and diverse points of view	3.62	0.95	0.0
40. Develop and maintain relevant geopolitical awareness	3.48	1.00	0.0
41. Resolve conflict through consensus-building and negotiation	3.36	1.03	0.8

Note. n = 120. Importance rated on a 5-pt Likert scale where 1 = Not Important; 3 = Important; 5 = Extremely Important.
All "not applicable" coded as missing prior to computing means and standard deviations.

Table 4.7. Descriptive Statistics on Army-Wide Technical MDs for Platoon Leaders/Company Commanders provided by SMEs at Forts Knox, Benning and Gordon, Ranked by Importance

MD Title	Importance (1 – 5)		%	Frequency (1 – 5)		%
	M	*SD*	NA	*M*	*SD*	NA
1. Engage enemy with individual weapons and machine guns	4.80	0.51	0.0	2.34	1.01	0.0
2. Perform combat lifesaving (CL) and evacuation	4.67	0.65	0.0	1.87	0.81	0.8
3. React to contact	4.61	0.80	0.8	2.35	0.95	1.7
4. Determine location and conduct cross-country movement (mounted/dismounted)	4.53	0.75	0.8	2.38	1.29	0.8
5. Conduct mounted offensive operations	4.34	0.88	6.7	2.10	1.08	9.2
6. Operate combat vehicles	4.34	0.88	3.4	2.78	1.21	5.0
7. Engage enemy with mobile assault weapons	4.33	0.88	5.0	2.13	1.06	5.9
8. Defeat improvised explosive devices (IED)	4.30	0.87	3.4	2.19	1.02	4.2
9. Establish and maintain accountability for property, equipment, and purchases	4.29	0.90	0.0	3.31	0.95	0.0
10. Conduct urban operations	4.27	1.02	0.8	2.40	1.14	2.5
11. Perform tactical voice and visual communications	4.25	0.87	0.0	2.84	1.28	0.0
12. Maintain situational awareness (SA) and respond to threats	4.19	0.93	0.0	2.73	1.31	0.0
13. Interact with indigenous individuals and groups	4.16	0.97	3.4	2.81	1.39	5.9
14. Engage and negotiate with host nationals and local leaders.	4.11	0.98	5.9	2.65	1.30	7.6
15. Conduct mounted defensive operations	4.00	1.02	5.9	2.00	1.17	7.6
16. Plot information on maps and overlays	3.99	0.97	0.8	2.56	1.11	2.5
17. Supervise operator maintenance	3.97	0.99	0.0	3.08	0.83	0.0
18. Conduct mounted tactical movement operations	3.95	1.04	3.4	2.45	1.15	3.4
19. Establish unit/individual proficiency in close quarter combat	3.87	1.09	0.8	2.04	0.82	0.8
20. Conduct reconnaissance, surveillance, and target acquisition (RSTA) operations	3.86	0.93	9.2	2.19	1.10	13.4
21. Conduct security and control operations	3.83	1.04	1.7	2.30	1.20	2.5
22. Conduct risk assessment	3.61	1.08	0.0	3.00	1.00	0.0
23. Conduct tactical logistics operations in support of mounted forces	3.61	1.11	6.7	2.02	1.07	10.1
24. Prepare and occupy individual and unit fighting positions	3.48	1.04	0.8	1.62	0.90	1.7
25. Perform administrative, record keeping and correspondence requirements	3.45	0.96	0.0	3.38	1.09	0.8
26. Prepare, deliver briefings and presentations	3.37	1.00	0.0	2.80	1.06	0.0
27. Conduct field sanitation, preventive medicine, and accident prevention operations	3.35	0.99	0.0	2.08	1.15	0.8
28. Plan and direct the employment of mines and hand grenades	3.24	1.11	3.4	1.29	0.56	5.8
29. Conduct mounted obstacle breaching	3.17	1.06	8.4	1.27	0.55	14.3
30. Transport and load/unload cargo and personnel	3.13	1.03	5.9	2.26	1.06	5.9
31. Employ, manage, and control unmanned aerial vehicles (UAV) and UAV support	3.01	1.09	15.1	1.65	0.92	20.2
32. React to nuclear, biological, chemical (NBC) hazards	2.56	1.23	0.8	1.01	0.09	2.5

Note. n = 119. Importance rated on a 5-pt Likert scale where 1 = Not Important; 3 = Important; 5 = Extremely Important. Frequency rated on a 5-pt Likert scale where 1 = four times a year or less; 2 = once or twice a month; 3 = once or twice a week; 4 = once or twice a day; 5 = once an hour or more.
All "not applicable" ratings were coded as missing prior to computing means and standard deviations.

Finally, the descriptive statistics for the platoon leader/company commander Army-Wide technical MDs are displayed in Table 4.7. The platoon leader/company commander Army-Wide technical MD that received the highest importance rating was, "Engage enemy with individual weapons and machine guns," followed by "Perform combat lifesaving and evacuation." The most frequently performed Army-Wide technical MD was "Perform administrative, record keeping and correspondence requirements." The lowest importance rating and the lowest frequency rating was provided for, "React to NBC hazards." This was the only platoon leader/company commander Army-Wide technical MD that received a mean importance rating lower than 3.0.

Sometimes in job analyses we see a high correspondence between frequency and importance ratings, suggesting that there is little to be gained by asking SMEs to provide both importance and frequency ratings. This does not appear to be the case in this data set. Several MDs received a high importance rating but are performed infrequently; for example, "Perform combat lifesaving (CL) and evacuation" *(M* Importance = 4.67*; M* Frequency = 1.87). Compared to the SAO evaluations, there is a slightly stronger tendency for raters to choose the "Not applicable" response choice, although the percentage choosing "Not applicable" for any particular Army-Wide technical MD is not high enough to warrant removing the MD from the list.

Despite the presumed differences between the officers from the target branches and the officers from the Combat Aviation Brigade (Site Visit 2), there was considerable overlap in the two sets of ratings, even though the rating instructions were revised after the second site visit to specify "in your last TO&E assignment." For example, "Perform combat lifesaving (CL) and evacuation" was among the highest rated platoon leader/company commander Army-Wide technical MDs in terms of importance by SMEs who reviewed the preliminary lists and those attending the Captains Career Course at Fort Knox, Fort Benning, and Fort Gordon. Similarly, SMEs at all locations indicated that "Perform administrative, record keeping and correspondence requirements" was the most frequently performed platoon leader/company commander Army-Wide technical MD. Moreover, SMEs across all locations provided the lowest importance ratings for "React to NBC hazards." This overlap in quantitative findings across locations lends credence to the notion of this being an *Army-Wide* technical MD list.

Review of Branch-Specific Technical Major Duties

Armor Branch

According to the website GoArmy.com, "the Army's Armor Branch is responsible for all the tank and cavalry/forward reconnaissance operations on the battlefield. The role of an Armor Officer is to be a leader in operations specific to the Armor Branch and to lead others in many areas of combat operations. An Armor Officer may either work with tank units that utilize the M1A1 and M1A2 Abrams Tanks, or cavalry units responsible for forward reconnaissance operations."

To prepare draft Army branch-specific MDs, HumRRO reviewed work previously done on Armor performance requirements for the Army O*NET project (Russell et al., 2008) and several Army manuals and documents (e.g., ARTEP 17-237-10 *Mission Training for Tank*

Platoon; Program of Instruction for Armor Basic Officer Leader Course [BOLC III]; and Maneuver Captains Career Course Point Allocations as of 09 March 2010). Based on these materials, we drafted separate, though overlapping, MDs for tank and cavalry units. We also drafted separate, though overlapping, MD lists for platoon leaders and company commanders. At the level of the MDs, there is some overlap across unit types and positions, although there would be variability in the more specific tasks performed in each type of unit and in the technical knowledge and skills required to perform those activities. As noted earlier, some of these MDs might also be performed in other branches, using different types of equipment or technical procedures, so we do not claim that these MDs are exclusive to the Armor branch, only that they are considered core duties for officers in the Armor branch. We then asked officers attending the Maneuver Captains Career Course at Fort Knox to review the lists. We asked the entire group to review the Leadership MDs, Army-Wide technical MDs, and SAOs (described above), but we asked only the 46 who identified their branch as Armor to review the Armor branch-specific technical MDs. We asked them to review MD lists for (a) tank platoon leaders, (b) tank company leaders, (c) cavalry platoon leaders, and (d) cavalry troop leaders[10]. Table 4.8 shows the results of this qualitative discussion. (Appendix H shows the entire list of MDs for each unit and position, accompanied by definitions.) The Armor branch SMEs felt that 11 of the MDs are relevant for both unit types (tank/cavalry) and for both positions (platoon leader/company commander), keeping in mind that, while the MD titles may be the same across units/positions, the definition for each one may be slightly different. They felt that the remaining 8 MDs are relevant for only one unit type or for only a subset of the positions. Clearly, we cannot draw definitive conclusions based on input from 46 officers. We recommend collecting additional qualitative and quantitative evaluations of these MDs from Armor officers in cavalry and tank units who have experience at the platoon leader and troop/company command levels.

Table 4.8. List of MDs Developed for the Armor Branch

MD Title	Tank Platoon	Tank Company	Cavalry Platoon	Cavalry Troop
1. Conduct battle command planning and mission preparation	✓	✓	✓	✓
2. Conduct offensive operations	✓	✓	✓	✓
3. Conduct operations with combined arms and other forces	✓	✓	✓	✓
4. Conduct sustainment operations	✓	✓	✓	✓
5. Conduct Soldier support operations	✓	✓	✓	✓
6. Conduct stability operations	✓	✓	✓	✓
7. Conduct security operations	✓	✓	✓	✓
8. Conduct training operations	✓	✓	✓	✓
9. Use and integrate combat multipliers	✓	✓	✓	✓
10. Conduct tactical operations	✓	✓	✓	✓
11. Conduct defensive operations	✓	✓	✓	✓
12. Conduct intelligence/reconnaissance operations	✓	✓		
13. Conduct tank movement	✓			
14. Conduct fire support and CAS/CCA missions		✓		
15. Conduct mobility operations		✓		
16. Operate as member of a tank crew	✓			
17. Conduct reconnaissance operations			✓	✓
18. Conduct tactical movement			✓	✓
19. Conduct indirect fire support and CAS/CCA missions	✓		✓	

Infantry Branch

According to the website GoArmy.com, "The Infantry is the main land combat force and core fighting strength of the Army. It's equally important during peacetime and in combat. The role of an Infantry Officer is to be a leader in operations specific to the Infantry and to lead others in all areas of land combat." Infantry Branch company-grade officer assignments are predominately to light (dismounted), heavy (infantry fighting vehicle [IFV]), or Stryker units. Other assignments include airborne, airmobile, and Ranger units. While the latter are essentially light infantry units, they possess some unique operational capabilities and employment characteristics.

The Infantry branch-specific MDs were developed in a manner similar to the Armor MDs. A HumRRO staff member knowledgeable in both infantry operations and MD development methodology reviewed pertinent Infantry doctrine and extracted a list of mission performance requirements at the platoon and company levels, including publications such as FM 3-21.8 *Infantry Rifle Platoon and Squad*, FM 3-21.71 *Mechanized Infantry Platoon and Squad (Bradley)*, and ARTEP 7-10-MTP, *MTP for the Infantry Rifle Company*. The performance requirements were then synthesized into MD-level statements and definitions were prepared. As with the other MD development efforts, this was an iterative process; as definitions were refined, performance requirements were consolidated or separated and the MD statements and their supporting definitions were rewritten and enhanced. Finally, other project staff members reviewed the MD statements and descriptions for uniformity, consistency, exclusivity, and readability. The list of Infantry MD statements and definitions is provided in Appendix I.

We took the MDs to Fort Benning where we able to access captains attending the Maneuver Captains Career Course at that location. Of the 30 officers who participated, 16 identified themselves as Infantry branch. We asked all 30 participants to review the Leadership and Army-Wide Technical MD lists and the SAO list (described above), but only asked those who identified their branch as Infantry to review the Infantry branch-specific technical MD lists. We intended to conduct group discussions following the rating sessions; however, scheduling conflicts precluded this and discussions were conducted with only 4 of the Infantry SMEs. All 4 indicated that the MD lists were complete and an accurate reflection of Infantry officer jobs, particularly for the Infantry platoon leader position. (It should be noted that most captains attending the Maneuver Captains Career Course have not yet had company command experience and their ratings of the company commander MDs are likely more uncertain than those they provided for the platoon leader position.)

We were able to collect quantitative evaluations of the Infantry platoon and company commander MDs from 16 infantry SMEs. The results are shown in Tables 4.9 and 4.10 for Infantry platoon leader and Infantry company commander, respectively. We cannot draw any firm conclusions based on evaluations from 16 raters. We are not particularly surprised to find that the mean importance ratings are high for all of the MDs, given that we were attempting to delineate the major duty requirements for infantry officers. The frequency ratings are more variable than the importance ratings which is not surprising given that the raters came from different types of infantry units (i.e., heavy, light, Stryker). The variability was also slightly higher in the company commander frequency ratings, as were the number of "not applicable"

ratings. This difference probably reflects the lack of first-hand direct experience in the company commander position for most of the respondents.

The number of infantry SMEs was too small to attempt to evaluate differences by unit type, but such differences should be more fully explored in the future. Nevertheless, we are confident that we have a solid list of MDs from which to work. The next steps would be to (a) review these MDs and their associated statistics with another group of SMEs and (b) collect ratings from a much larger sample of infantry SMEs, making sure to include those with company command experience.

Table 4.9. Mean Importance and Frequency Ratings on Infantry Platoon Leader MDs

	Importance (1 – 5)		%	Frequency (1 – 5)		%
MD Title	M	SD	NA	M	SD	NA
1. Conduct infantry platoon troop leading procedures (TLP)	4.53	0.64	0.06	3.33	0.62	6.7
2. Perform infantry platoon operations risk management assessment and fratricide avoidance	4.53	0.74	0.06	3.07	1.10	6.7
3. Conduct light infantry platoon tactical movement	4.67	0.49	0.06	3.73	0.59	6.7
4. Conduct heavy infantry platoon tactical movement	4.36	0.67	0.31	3.82	1.47	33.3
5. Plan and develop infantry platoon offensive operations	4.43	0.51	0.13	3.00	0.68	13.3
6. Conduct infantry platoon movement to contact (MTC)	4.47	0.52	0.06	2.80	0.94	6.7
7. Perform infantry platoon actions on contact	4.93	0.26	0.06	2.53	0.74	6.7
8. Conduct infantry platoon attacks	4.47	0.74	0.06	2.00	0.76	6.7
9. Conduct infantry platoon operations in urban terrain	4.60	0.74	0.06	3.00	0.93	6.7
10. Plan and develop infantry platoon engagement area (EA)	3.67	1.05	0.06	1.86	1.03	13.3
11. Conduct infantry platoon defense	3.60	0.99	0.06	1.80	1.21	6.7
12. Prepare and conduct infantry platoon patrols	4.87	0.35	0.06	3.53	0.92	6.7
13. Conduct infantry platoon operations with tanks and other combat vehicles	3.80	1.01	0.06	2.57	1.22	13.3
14. Maximize machineguns and automatic weapons in infantry platoon operations	4.60	0.63	0.06	3.40	0.74	6.7
15. Employ shoulder launched and close combat missile systems in infantry platoon operations	3.73	1.16	0.06	1.60	0.99	6.7
16. Conduct infantry platoon observation post and check point operations	3.87	0.92	0.06	2.53	1.06	6.7
17. Conduct infantry platoon sustainment operations	3.73	1.22	0.06	2.80	1.08	6.7
18. Conduct infantry air mobile, air assault, or airborne operations	3.87	0.99	0.06	1.87	0.99	6.7

Note. n = 15. Importance rated on a 5-pt Likert scale where 1 = Not Important; 3 = Important; 5 = Extremely Important. Frequency rated on a 5-pt Likert scale where 1 = four times a year or less; 2 = once or twice a month; 3 = once or twice a week; 4 = once or twice a day; 5 = once an hour or more. NA=not applicable. All "not applicable" ratings were coded as missing prior to computing means and standard deviations.

Table 4.10. Mean Importance and Frequency Ratings on Infantry Company Commander MDs

MD Title	Importance (1 – 5)		%	Frequency (1 – 5)		%
	M	SD	NA	M	SD	NA
1. Conduct infantry company troop leading procedures (TLP)	4.75	0.45	0.00	3.27	0.88	6.3
2. Perform infantry company operations risk management assessment and fratricide avoidance	4.50	0.63	0.00	3.33	0.90	6.3
3. Conduct light infantry company tactical movement techniques	4.06	0.93	0.00	2.73	1.10	6.3
4. Conduct heavy infantry company tactical movement techniques	3.64	1.15	0.13	2.13	1.25	50.0
5. Plan and develop infantry company offensive operations	4.25	0.77	0.00	2.47	0.74	6.3
6. Conduct infantry company movement to contact	4.06	1.24	0.00	2.07	0.96	6.3
7. Perform infantry company actions on contact	4.19	1.33	0.00	2.13	1.06	6.3
8. Execute infantry company fire and maneuver	4.38	0.96	0.00	1.87	0.83	6.3
9. Conduct infantry company attacks	4.56	0.63	0.00	2.00	0.76	6.3
10. Conduct infantry company urban operations (UO)	4.38	0.72	0.00	2.64	1.28	12.5
11. Plan and develop infantry company defensive operations	4.00	1.03	0.00	2.20	1.08	6.3
12. Conduct infantry company defense	3.93	1.03	0.06	2.14	1.10	12.5
13. Plan and conduct infantry patrols at company level	3.88	1.26	0.00	2.13	0.92	6.3
14. Conduct infantry combined arms operations with tanks and other combat vehicles	4.00	1.20	0.06	2.00	0.91	18.8
15. Conduct infantry company breaching operations	3.38	1.15	0.00	1.29	0.47	12.5
16. Conduct infantry observation post and check point operations at company level	3.31	1.08	0.00	2.43	1.34	12.5
17. Integrate sniper operations at company level	3.69	0.87	0.00	2.27	1.03	6.3
18. Conduct infantry company sustainment operations	4.00	1.15	0.00	2.60	1.12	6.3
19. Establish and occupy infantry company lodgment area or forward operation base (FOB)	4.00	0.89	0.00	2.15	1.28	18.8
20. Conduct infantry company route security and convoy escort operations	3.50	1.15	0.00	2.38	1.12	18.8
21. Conduct infantry company tactical deployment/redeployment activities	3.88	1.02	0.00	1.20	0.56	6.3
22. Conduct infantry air mobile, air assault, or airborne operations	3.94	0.93	0.00	1.53	0.52	6.3
23. Conduct infantry weapons company operations	3.93	0.92	0.13	2.18	0.98	31.3

Note. n = 16. Importance rated on a 5-pt Likert scale where 1 = Not Important; 3 = Important; 5 = Extremely Important. Frequency rated on a 5-pt Likert scale where 1 = four times a year or less; 2 = once or twice a month; 3 = once or twice a week; 4 = once or twice a day; 5 = once an hour or more. NA=not applicable. All "not applicable" ratings were coded as missing prior to computing means and standard deviations.

Signal Branch

According to the website GoArmy.com, "The Army's Signal Corps is responsible for all systems of communication for the entire Army. The Signal Corps strives to always provide seamless, secure, consistent and dynamic information systems at all levels of command and for any situation. On every mission, communications and data management (handled by the Signal Corps) have become increasingly critical for the Army and its continued success. A Signal Corps Officer, then, must be an expert in planning, installing, integrating, operating and maintaining the

Army's voice, data and information systems, services and resources. Signal Officers must be highly intelligent, forward-thinking and have a complete knowledge of these various technologies."

When the Army transitioned to modular brigade organizational structure, a transition that is not yet complete, the signal support organizations were significantly affected. HumRRO located a description of the Signal Officer Career Progression from the Human Resources Command (March 20, 2006) displayed in Figure 4.1.[11] The figure displays two parallel tracks based on the signal mission. The two tracks are Corps/Division Support and Network Enterprise Technical Command (NETCOM). Using this framework we attempted to identify Army doctrine to help us identify the performance requirements for each of these parallel tracks. We identified two primary source documents: *Officer Foundation Standards Manual AOC 25A for Signal Commissioned Officers* (Department of the Army, 2007) for the Corps/Division track and FMI 6-02.45 *Signal Support to Theater Operations* (Department of the Army, 2007) for the NETCOM track. For the Division/Corps track, the OFS provided a good foundation for drafting a list of MDs for platoon leaders and for battalion S6s, so we drafted MDs for both positions based on the OFS. (The battalion S6 position is considered equivalent to a company command position, so we considered it to fall within the scope of this project.) We were unable to draft MDs for the NETCOM career track because Signal SMEs told us that the FMI was entirely outdated after NETCOM was reorganized in October 2009 and we could not find any other documentation to help us draft NETCOM MDs that reflect the current NETCOM structure and duties. Securing enough support from active duty Signal officers with NETCOM experience to develop NETCOM MDs from scratch was beyond the scope of this project.

The Corps/Division branch-specific MDs were reviewed by a small number of signal SMEs who were either attending the Signal Captains Career Course at Fort Benning or were part of the 63rd ESB. In all, 21 signal SMEs reviewed these MDs. Their consensus was that the MDs are accurate for these duty assignments, but they also reminded us that officer duties vary widely in the Signal branch depending on the officer's unit and duty assignment, and that the degree of variability increases above the platoon leader level. Tables 4.11 and 4.12 list the Signal branch-specific technical duties for platoon leaders (tactical and strategic) and for the battalion S6 (company command-equivalent) position, in the Corps/Division side of this branch. Appendix J includes definitions for these MDs. Note that the definitions for the platoon leader MDs vary slightly, depending on the type of position (tactical versus strategic), even though the MD labels are the same across both positions.

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[11] Retrieved February 18, 2010 from http://www.5sigcmd.army.mil/NewsArchive/publications/Signal%20SOF_ver2.pdf
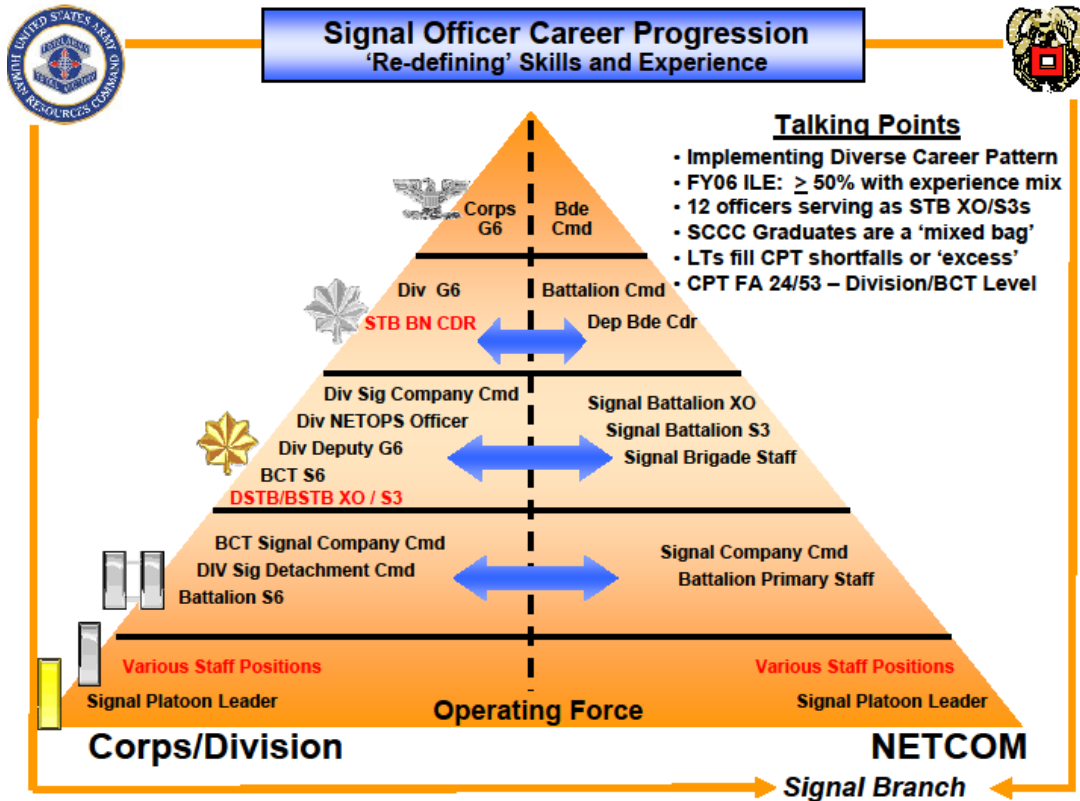
Figure 4.1. Briefing slide illustrating Signal branch organizational structure.

Table 4.11. List of Tactical and Strategic Platoon Leader Major Duties (Signal Branch)

MD Title
1. Plan signal support
2. Manage signal support
3. Plan data support
4. Manage data support
5. Plan COMSEC Support
6. Manage internetwork connectivity
7. Manage restoration of Communication Services

Table 4.12. List of Battalion S6 (Captain) Major Duties (Signal Branch)

MD Title
1. Plan signal support
2. Manage signal support
3. Plan data and voice support
4. Manage data and voice support
5. Plan combat net radio support
6. Manage combat net radio support
7. Plan COMSEC Support
8. Manage COMSEC
9. Manage information assurance (IA)
10. Plan internetwork connectivity
11. Manage internetwork connectivity
12. Manage restoration of Communication Services
13. Coordinate information management

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Quartermaster Branch

For the Quartermaster and Transportation branches, we attempted to develop branch-specific MDs for platoon leaders only. At this level, it is possible to identify duty assignments specific to each branch. As noted in Chapter 1, Quartermaster and Transportation officers attend the Logistics Captains Career Course. Beyond that point, that is, by the time they could become a company commander, company-level assignments may be multifunctional.

According to the website GoArmy.com, ""The Quartermaster Corps is the logistical center point for all Army operations. Quartermaster Officers are responsible for making sure equipment, materials and systems are available and functioning for missions. More specifically, the Quartermaster Officer provides supply support for Soldiers and units in field services, aerial delivery and material and distribution management." The Quartermaster branch is organized in a similar manner to the Transportation branch and, in fact, some functions that were traditionally performed by this branch are now performed by the Transportation branch under the modular brigade structure.

HumRRO's initial step was to search the Quartermaster school website[12] to learn about the Quartermaster Corps and its overall function in the Army. We were unable to locate any materials on the website that would help us develop MD descriptions. There was a great deal of course information and school information for the various enlisted MOS, but no information specific to officer positions. Next, we searched the doctrine website, but found no OFSs for Quartermaster officer positions. There are many manuals covering specific tasks or general operations on this website, but information was too fine-grained for the purpose of identifying MDs for quartermaster positions. We searched the Internet for relevant information but found nothing that described the duties of a platoon leader in the Quartermaster branch.

Ultimately, we attempted to draft MDs for two platoon leader positions within the Quartermaster branch – supply platoon leader and distribution platoon leader. Our choice was based on the fact that these were the only two positions for which we could find a starting point for creating draft MDs. We used FM 10-15, *Basic Doctrine Manual for Supply and Storage,* as the foundation for drafting *supply* platoon leader MDs because Chapter 2 in this source lists and describes platoon leader responsibilities. We created 13 draft MDs based on this document as shown in Table 4.13. Our internal Army expert pointed out that FM 10-15 is based on the old Division Support Command (DISCOM) and Corps Support Command (COSCOM) support systems. DISCOM has, by and large, been done away with, and COSCOM has been replaced, roughly, by the ESBs. Therefore, we know that these MDs, while based on the only viable document we could find to describe platoon leader duties for a supply position, will need to be carefully reviewed and updated by Quartermaster branch SMEs to fully reflect current quartermaster duties. Doing so was beyond the scope of this effort.

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[12] www.quartermaster.army.mil

Table 4.13. Starting Point for Supply Platoon Leader Major Duties (Quartermaster Branch)

MD Title
1. Materials receipt
2. Materials storage
3. Maintain security of tools and materials
4. Storage quality assurance
5. Issue materials
6. Class I and water supply operations
7. Slingload operations
8. Class II, IV, and VII operations
9. Laundry and bath operations
10. Mortuary affairs

To develop draft MDs for the *distribution* platoon leader position, we used the STP for skill levels 30 and 40 for the 92A (automated logistical specialist) enlisted MOS because we could not find any officer-specific publications. We knew that this STP contains duties related to executing the Standard Army Retail Supply System (SARSS) which is no longer used, but we felt that, at a broad level, these MDs could still serve as a starting point for discussion with active duty Quartermaster branch officers. Table 4.14 shows the starting point for developing MD descriptions for distribution platoon leader MDs in a FSC. Appendix K contains the preliminary MDs for two positions within the Quartermaster branch. These branch-specific MDs have not been reviewed by any quartermaster SMEs because doing so was beyond the scope of this project.

Table 4.14. Starting Point for Distribution Platoon Leader Major Duties (Forward Support Company) (Quartermaster Branch)

MD Title
1. Supervise the handling of hazardous materiel
2. Analyze performance metrics
3. Perform stockage level management
4. Conduct quality assurance inspection
5. Coordinate communications processes
6. Conduct supply support mission analysis
7. Coordinate logistical requirements
8. Operate/use/select distribution enablers (e.g., CROP, PLS, LHS, CHU)
9. Develop and protect (e.g., ensuring safety of supply convoy) lines of transport based on METT-TC
10. Implement replenishment operations (RO)
11. Coordinate company level distribution points
12. Implement choices regarding best transportation systems for Operating Environment (e.g., land vehicles, air transit)
13. Follow SOP or Army Doctrine when loading, distributing, and unloading the various classes of supply

Transportation Branch

According to the website, GoArmy.com, "The Transportation Corps is responsible for moving supplies, troops and equipment anywhere on the globe. During war, the Transportation Corps utilizes trucks, boats and airplanes to provide extremely fast support to the combat teams on the frontlines. Transportation Officers are experts in the systems, vehicles and procedures of moving troops and supplies in the Army."

We also had difficulty locating doctrine for transportation platoon leaders. The doctrine website contains 19 manuals related, generally, to transportation duties, but with no specification of platoon leader duties. Internet searches and a review of the Transportation school website turned up little that we could use other than general operations manuals. We determined that the best starting point for this branch was a list of MDs developed for senior NCOs and entry-level officers in the Transportation MOS/branch (88) in a prior research project (Russell, et al., 2008. These MDs were derived by a small group of senior NCOs and second lieutenants representing the Transportation MOS/branch. They are listed below in Table 4.15 and defined in Appendix L. These would serve as the starting point for discussions with active duty officers in the Transportation branch. Obtaining review input from Transportation branch SMEs was beyond the scope of this project.

Table 4.15. Starting Point for Transportation Branch Platoon Leader Major Duties

MD Title
1. Direct and lead convoy operations
2. Direct and lead defense of convoy
3. Supervise the maintenance and servicing of transport vehicles
4. Supervise the transport of personnel and cargo
5. Conduct movement control operations
6. Conduct marine transportation operations

Site Visits Focused on Battalion Commander Level

As the project progressed, we found it difficult (and in most cases impossible) to gain access to battalion commanders while visiting specific posts. Therefore, we traveled to the Army War College (AWC) and the Industrial College of the Armed Forces (ICAF) within the National Defense University (NDU) to interview lieutenant colonels and colonels who could speak to the appropriateness of the lists for the battalion commander position. Table 4.16 displays the number of SMEs at the AWC and ICAF who reviewed lists. All had at least 20 years of active duty service and all had experience as a platoon leader, company commander, battalion XO and/or battalion S3, and battalion commander. Two of the participants were female. They had experience in one or more of the following branches: infantry, armor, signal, logistics, transportation, and aviation.

Table 4.16. Number of SMEs Providing Ratings on Descriptor Lists at AWC and ICAF

Grade	SAOs	Leadership MDs	BN Cdr Technical MDs
O5	1	1	1
O6	5	5	5
Total	6	6	6

During the interviews, lieutenant colonels and colonels were asked to provide feedback on the SAO list, the leadership MDs, and the battalion commander technical MD list. In reviewing the list, SMEs were asked to indicate which SAOs and MDs differed in importance across officer ranks (from lieutenant to lieutenant colonel). Overall, the SMEs indicated the lists of SAOs and leadership MDs were comprehensive. Several SMEs indicated that "Critical

Thinking" was the most important SAO and that "Modeling Army Values" was the most important leadership MD for a battalion commander. For ease of presentation, we included columns to indicate the general importance (high, medium or low) that lieutenant colonels and colonels indicated for each SAO (see Appendix B) and leadership MD (see Appendix C).

In reviewing the battalion commander technical MDs, the SMEs noted that the list mapped to the traditional MDMP (military decision making process). Several SMEs suggested, however, that the list could be expanded to include operating in unconventional situations such as coordinating efforts in large distributed areas of operation without guidance. One SME suggested that operating in large distributed areas was one of the biggest differences in requirements when deployed versus in garrison.

The final list of 46 leadership MDs presented in Appendix C reflect input from former battalion commanders and the project technical advisory committee (Dr. Ken Pearlman, Dr. John Campbell, Dr. Teresa Russell, and Mr. Roy Campbell). This list is somewhat different than the list used for collecting quantitative evaluations at Forts Campbell, Knox, Benning, and Gordon. Specifically, these participants made the following suggestions, which we enacted:

- Divided the MD "Energize and motivate others toward mission accomplishment" into "Communicate mission goals and objectives," "Direct others to work toward mission accomplishments," and "Influence others to work toward mission accomplishments."
- Divided the MD "Build trust in others outside the line of authority" into "Build trust with other units within the Army," "Build trust with individuals, groups, and organizations outside the Army," "Build and maintain working relationships with other Army units" and "Build and maintain working relationships with individuals, groups, and organizations outside the Army."
- Added the MD "Create an environment that fosters innovation and critical thinking."

Focus Group Focused on Battalion S3 and Battalion XO Positions

To supplement the input we obtained from SMEs at the visits to the Army posts, we met with two male retired Army officers, each with more than 20 years of active or reserve duty experience. Both have experience as battalion S3, and one has experience as a battalion XO. Both have conducted extensive Army research in their current positions as HumRRO employees, and can knowledgably speak to the appropriateness of the lists.

During the focus group, both SMEs were asked to provide extensive feedback on the battalion S3 technical MD list, and the SME with experience as a battalion XO was asked to provide extensive feedback on the battalion XO list. While the SMEs indicated that the draft lists were adequate, they recommended that the lists be cross-referenced with more recent primary source materials; in particular, the *Officer Foundation Standards for Combined Arms Brigade Staff Officers* volume 2 for battalion S3s and volume 4 for battalion XOs (Department of the Army, 2004) and the recently published FM 5-0, *The Operations Process* (Department of the Army, 2010). The SMEs worked with us to revise and integrate our initial lists to reflect the content of these additional primary source documents. They reviewed and edited the revised lists for clarity, accuracy, and completeness. Their suggestions are incorporated in the battalion XO and battalion S3 MD lists shown in Appendices E and F, respectively.

Summary of SME Review

Each of the lists is based, to the extent possible, on existing Army doctrine or research in related areas (e.g., officer competency modeling, civilian leadership literature). The lists were then reviewed by at least a small number of Army officers with experience in each of the five positions explored in this project. We were able to obtain quantitative evaluations for the platoon leader/company commander level, plus qualitative evaluations for the battalion XO, battalion S3, and battalion commander levels. We also drafted branch-specific technical MDs for at least the platoon leader level in five branches, but did not have sufficient resources or time to have them vetted by Army SMEs from the target branches.

SMEs typically rated descriptors on all lists as important. Only one descriptor on one of the lists ("React to NBC hazards" on the platoon leader/company commander Army-Wide technical MD list) received a mean importance rating lower than 3.0 (i.e., "important), indicating that this activity is still at least somewhat important. Furthermore, it is possible that the relatively low importance rating for this MD was impacted by the infrequency with which officers indicated they engaged in this duty.

The generally high ratings are likely due to the process used to develop these lists. Recall that, with the exception of a few branch-specific MD lists, all of the lists were derived from prior Army research and from Army training doctrine. Consequently, by definition, the content of the lists reflects things officers need to be able to carry out to a high level of competence and we obtained confirmation of this fact during the SME review process. We did not intentionally include descriptors believed to be unimportant because we felt it would be an inefficient use of reviewer time and could detract from the credibility of the lists. We felt confident that officers would carefully attend to their review task, particularly since we were able to collect all of the responses, both qualitative and quantitative, in small, face-to-face focus groups or individual interviews.

While the mean importance ratings are generally quite high, there is some variability in importance levels across descriptors in each list, and the rating patterns make sense. For example, the leadership MD "Develop and maintain geopolitical awareness" received the lowest or second lowest mean importance rating across groups that rated it for the platoon leader/company commander level. The mean rating was, in each case, close to 3.0, so this is still an important activity, but it is not as important as leadership MDs that are more directly and obviously related to leading a platoon or a company, such as "Lead with confidence in adverse situations" or "Establish mission goals and objectives." As a second example, an Army-Wide technical MD such as "Perform combat lifesaving (CL) and evacuation" received among the highest mean importance ratings, higher than Army-Wide technical MDs that do not directly involve lifesaving such as "Employ, manage, and control unmanned aerial vehicles (UAV) and UAV support." Neither of these MDs is performed very frequently, but lifesaving is clearly rated as more important than handling UAVs. As a final example, the highest rated leadership MD was, "Lead with confidence in adverse situations" ($M = 4.80$) and the lowest rated leadership MD was "Resolve conflict through consensus-building and negotiation" ($M = 3.36$). This finding may be consistent with the notion of Army officers as leaders and directors of their subordinates as opposed to consensus builders and negotiators. The latter leadership MD, while not unimportant, is clearly not as important as the former leadership MD.

We investigated potential differences across the armor officers, infantry officers and signal officers in the frequency with which they selected the "Not applicable" option on the SAO, leadership MD, and platoon leader/company commander Army-Wide MD lists. The results from the one-way ANOVAs indicate that there were no significant differences amongst branches in their use of the "Not applicable" rating on the leadership MDs or on the SAOs. There were, however, significant differences across the three branches in their use of the "Not applicable" rating on the platoon leader/company commander Army-Wide technical MD lists, $F(2,104) =$ 12.70, $p = 0.00$). Tukey post-hoc comparisons of the three branches indicated that signal officers used the "Not applicable" option ($M = 3.04$) significantly more often than armor officers ($M = 0.14$) and infantry officers ($M = 0.22$). This finding makes sense because many of the platoon leader/company commander Army-Wide technical MDs are related to combat activities. We believe that many of these MDs are doctrinally required for officers in all branches, as indicated by their inclusion in sources such as the Army Leadership Manual (FM 6-22; Department of the Army, 2006) and the current leader development strategy (Department of the Army, 2009b). However, in day-to-day operations, combat-related MDs may well be more important and more frequently performed by platoon leaders and company commanders in MFE branches (Armor and Infantry). It may be most accurate to state that that some of the platoon leader/company commander technical MDs are "highly shared" across branches, as opposed to being truly Army wide (i.e., performed by every officer branch). More input from officers across a variety of branches is needed to make this determination.

The branch-specific MDs require additional review by Army officers before they can be considered final, particularly those for the Signal, Quartermaster, and Transportation branches. To fully capture all MD requirements for the latter three branches will, in our opinion, require a great deal of input from a wide array of officers. If it would be too time-consuming or costly to collect raw input from a large array of current Army officers, it might be possible to hire recently retired officers with experience in specific branches to develop the initial MD lists. These consultants could work with persons trained in the techniques of job analysis to ensure that the efforts are consistent with best practices and consistent in level of specificity across branches.

To collect additional quantitative information in the future, ARI could put any or all of the MD and SAO lists into a survey format. The survey sampling plan, of course, would be driven by the type of summary evaluations and comparisons desired. For example, to compare the relative importance of SAOs or leadership MDs across levels, it will be necessary to collect data from a much larger sample of officers in the higher-ranking positions. To compare the relative importance and frequency of technical MDs across branches, it will be necessary to collect quantitative evaluations from a number of officers representing each branch and, to avoid confounding level differences with branch differences, the sample would need to include a number of officers from each level by branch combination.

Chapter 5. Building a Model of Officer Performance

Major duties describe key elements of officer performance. Efforts to change or improve officer performance, by definition, must focus on changing the abilities, skills, or motivation levels that underlie such performance. We believe that a model of performance provides a useful framework for thinking about the human determinants of performance and how those determinants might best be evaluated in a selection process or taught in a training program. A well-researched model of performance already exists, based on extensive study of performance in Army enlisted and non-commissioned officer (NCO) jobs. It can be readily adapted for officer jobs. We present this model in the next section.

An Officer Performance Model

Campbell Model of Performance

John Campbell and colleagues (Campbell, McCloy, Oppler, & Sager, 1993) developed a model to explain individual differences in job performance. The model posits that individual differences on specific components of job performance are a function of three major determinants: declarative knowledge, procedural knowledge and skill, and motivation. Declarative knowledge (DK) is knowledge about facts and things; that is, knowing what to do. Procedural knowledge and skill (PKS) represent the application of declarative knowledge; that is, knowing how to do it. Motivation (M) occurs through three choice behaviors: choosing to expend at least some effort, choosing how much effort to expend, and choosing how long to expend effort on a particular task.

For the purposes of this and future efforts, we feel that the Campbell model provides a good framework for thinking about officer performance and the types of predictor and criterion measures that might be useful for officer selection and classification. The model is shown in Figure 5.1, with minor adaptations to illustrate how it provides a framework for discussing and predicting Army officer performance. (See Campbell et al., 1993, p. 43 for the original depiction.) The top row of Figure 5.1 shows the relationship between officer performance and its determinants: DK, PKS, and M. The middle row is based on the Campbell model but has been adapted to show how the products from this project could be mapped onto it. On the left-hand side, the MDs identified in this project can be depicted as dimensions or components of performance. Here, they are presented only at the broadest level: Leadership MDs, Army-Wide technical MDs, and branch-specific MDs. In the middle of the figure, broad SAO types are arrayed according the determinant(s) they are most likely to impact. For example, DK can be described as consisting of Army-Wide knowledge and Branch-specific knowledge. PKS involves the acquisition and use of a variety of skills (communication, leadership, management, etc.). M involves the choice behaviors noted earlier.

Predictor measures can also be mapped onto the model, as shown in the bottom row of Figure 5.1, indicating how they link to the various types of SAOs that underlie acquisition of DK and PKS and to motivational processes. As the model shows, some SAOs and some predictor measures likely tap more than one performance determinant (e.g., biodata measures may tap DK or PKS, and possibly even M).

Officer Performance Components	=	Declarative Knowledge (DK)	x	Procedural Knowledge and Skill (PKS)	x	Motivation (M)
↑		↑		↑		↑
Leadership MDs		Common task knowledge		Communication skills		Choice to expend effort
Army-wide Technical MDs		Branch-specific knowledge		Social/Interpersonal skills		Level of effort
Branch-specific MDs				Self-management skills		Persistence of efforts
				Leadership skills		
				Management skills		
				Technical skills		

Potential Predictor Measures

	Declarative Knowledge	Procedural Knowledge and Skill	Motivation
	↑	↑	↑
	Measures of achievement (e.g., SAT)	Cognitive ability measures	P-E fit measures
		Measures of interpersonal/social skills	• Interests
	Education, Training, and Experience (e.g., college major)		• Values
		Measures of tacit knowledge	Motivation to lead
	Biodata	Education, training, and experience	Self-efficacy
		Biodata	Personality measures

Figure 5.1. Extension of the Campbell performance model to Army officer performance.

Identifying Performance Components for Inclusion in the Model of Officer Performance

As noted in the last section, we can array the MDs from this effort on the left-hand side of the model of officer performance. The determinants, DK, PKS, and M, likely interact in somewhat different ways depending on which component of performance is the focus (Johnson, 2003; Johnson, Duehr, Hezlett, Muros, & Ferstl, 2008). For performance modeling purposes, it is probably unnecessary and not very useful to delineate components of performance at the MD level of detail. At a much broader level, it is possible to organize the MDs into only three broad components of officer performance, as shown in Figure 5.1: leadership, Army-Wide technical, and branch-specific technical. However, this level of detail is too broad to be very helpful in understanding different aspects of officer performance. Therefore, we searched for studies that delineated the key components of military leader performance at a moderate level of detail. We found four and these are summarized in Figure 5.2. The first is the Army's own leadership manual, FM 6-22, which clusters *leadership* MDs into to three broad components and several sub-components, which are called "competencies."[13] Our leadership MDs can, of course, be readily categorized according to the FM 6-22 "competencies" because our MDs are based on this same document. However, FM 6-22 does not provide an organizing structure for *technical* aspects of officer performance. The Air Force and the Navy have developed their own categorization schemes for military officer performance (Hedge, Borman, Bruskiewicz, & Bourne, 2004; Lentz et al., 2009). Like FM 6-22, these categorization schemes focus primarily on *leadership* performance components, with relatively little attention paid to technical components. Finally, Campbell and colleagues (Campbell et al., 1993; Campbell, 1999) outlined performance components based on massive research efforts to define and measure performance in Army enlisted jobs, including performance in noncommissioned officer (NCO) jobs. While specific wording varies from one list of performance components to another, there is a great deal of comparability across them. Each includes Communication, Integrity/Discipline, Resource Management, Leadership, and Mentoring/Coaching. In addition, the Campbell et al. (1993) model includes job-specific and non-job specific task proficiency which correspond to Army-Wide technical and branch-specific technical MDs.

We suggest using the FM 6-22 organizing scheme to represent the *leadership* MDs identified in this project and the first six components in the Campbell et al. (1993) organizing scheme to represent non-leadership components of performance. Figure 5.3 displays how the Campbell performance model would look if we list the FM 6-22 and Campbell et al. (1993) performance components in this manner.

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[13] In our view, the label "competencies" is misleading because it implies a blend of things that officers do and skills and abilities that they must possess. Nevertheless, these "competencies" could serve as a useful categorization scheme for the MDs which are also based on FM 6-22.

Army Leader Manual (FM 6-22)	Supervisory Performance from Navy Task Force EXCEL Project (Hedge et al., 2004)	Air Force Officership Behaviors (Lentz et al., 2009)	Major Performance Components (Campbell, McCloy, Oppler, & Sager, 1993)
Leads • Leads others • Extends influence beyond the chain of command • Leads by example • Communicates *Develops* • Creates a positive environment • Prepares self • Develops others *Achieves* • Gets results	*Coaching/Mentoring:* Providing guidance to subordinates; assessing strengths and weaknesses in personnel and providing them with honest and specific feedback; designing opportunities for subordinates to develop new skills and assisting them in establishing career plans; providing subordinates with strategic vision and goals; sharing knowledge and experience with subordinates; creating a work environment that makes individuals feel valued and motivates them to excel. *Resource Stewardship:* Managing resources efficiently and effectively; ensuring deadlines are met through planning and effective communication of objectives; gathering information, identifying goals, assessing available resources, and developing innovative plans to complete projects on time and within budget; prioritizing tasks and delegating work appropriately; relating tasks/assignments to the overall unit mission; sorting through large quantities of information efficiently. *Displaying Professionalism and Integrity:* Accepting responsibility for own and subordinates' actions; always maintaining ethical principles and telling the truth, regardless of consequences; displaying uncompromising values (e.g., honor, courage, commitment, integrity);	*Displaying Integrity, Ethical Behavior, and Professionalism.* Displaying uncompromising commitment to the Air Force core values; always maintaining ethical principles and telling the truth, regardless of consequences; accepting responsibility for own and subordinates' actions; maintaining sharp military appearance and physical health/fitness; supporting Air Force mission and goals; having a thorough understanding of military regulations and initiatives and carrying them out in accordance with Air Force standards; following policies, regulations, and orders, and defending them to others; understanding the chain of command, and accepting and respecting the decisions of superiors; displaying appropriate courtesies to others; understanding how policies and actions fit into the overall mission scheme. *Decision-Making and Managing Resources.* Managing resources efficiently and effectively; ensuring deadlines are met through planning, and effectively utilizing resources; gathering information, identifying risks and goals, and assessing available resources to complete projects on time and within budget; prioritizing tasks; sorting through large quantities of information efficiently; focusing on multiple tasks and requirements; making sound decisions; appropriately considering relevant sides of an issue; remaining focused and decisive in stressful situations.	*Job-specific task proficiency*: Degree to which an individual can perform the core substance of technical tasks central to a specific job. These are job-specific performance behaviors that distinguish the substantive content of one job from another. *Non-job-specific task proficiency:* Degree to which an individual can perform tasks required in the employing organization, but that are not specific to any particular job. In the military, these are institutionalized as a set of common tasks (e.g., first aid, basic navigation) for which every Soldier is responsible. *Written and oral communication task proficiency:* Degree of proficiency in writing or speaking, independent of the correctness of the subject matter. This activity involves making formal oral or written presentations to audiences that vary in size from very small to very large. *Demonstrating effort:* The consistency of an individual's effort day by day, the frequency with which an individual will expend extra effort when required, and the willingness to keep working under adverse conditions.

Figure 5.2. Components of military leader performance.

	willingly undertaking necessary actions, even when physically risky; maintaining sharp military appearance and physical health/fitness; supporting Navy and Command missions and goals. *Communication Skills:* Practicing meaningful two-way communication (i.e., speaking clearly, listening attentively and clarifying information); providing timely and relevant information up and down the chain of command; tailoring presentations to the level of the audience; expressing opinions when appropriate; expressing oneself in a manner that produces a productive and harmonious environment; ability to evaluate the importance of information being communicated. *Leading Change:* Being open to new ideas and new methods for accomplishing goals; ability to adjust to a rapidly changing environment and to modify goals and objectives based on emerging requirements; embracing change and looking for better methods/techniques to accomplish tasks; ability to adapt to new and changing missions, tasks, and situations; remaining calm, focused, and competent in changing or stressful situations. *Leading People:* Effectively building and leading individual and team activities; persuading, inspiring, and motivating others, regardless of their relative positions in the hierarchy; creating a sense of enthusiasm and purpose in own	*Communication Skills*. Practicing meaningful two-way communication (i.e., speaking and writing clearly, listening attentively and clarifying information); providing timely and relevant information up and down the chain of command; tailoring presentations to the level of the audience; expressing opinions when appropriate; expressing oneself in a manner that produces a productive and harmonious environment; ability to evaluate the importance of information being communicated. *Mentoring Others*. Providing guidance to subordinates and others; assessing strengths and weaknesses in personnel and providing them with honest and specific feedback; designing opportunities for subordinates to develop new skills, and assisting them in establishing career plans; providing subordinates with strategic vision and goals; sharing knowledge and experience with subordinates. *Leading Others*. Effectively building and leading individual and team activities; persuading, inspiring, and motivating others, regardless of their relative positions in the hierarchy; creating a sense of enthusiasm and purpose in own team; demonstrating a positive attitude, and team spirit to inspire subordinates; effectively adopting different leadership styles as appropriate to individuals and settings. *Pursuing Personal and Professional*	*Maintaining personal discipline:* Degree to which negative behavior such as alcohol and substance abuse at work, law or rules infractions, and excessive absenteeism are avoided. *Facilitating peer and team performance*. Degree to which the individual supports his or her peers, helps them with job problems, and acts as a de facto trainer; also encompasses how well an individual facilitates group functioning by being a good model, keeping the group goal-directed, and reinforcing participation by the other group members. *Supervision/leadership:* Degree of proficiency in behaviors directed at influencing the performance of subordinates through face-to-face interpersonal interaction and influence. The prior component focused on peer leaders. This component focuses on formal supervisory duties. *Management/administration:* Degree of proficiency in management elements distinct from supervision, including articulating goals for a unit or enterprise, organizing people and resources to work on goals, monitoring progress, helping to solve problems or overcome crises that stand in the way of goal accomplishment, controlling expenditures, obtaining additional

Figure 5.2. Components of military leader performance.

	team; demonstrating a positive attitude, team spirit, and personality to inspire subordinates; effectively adopting different leadership styles as appropriate to individuals and settings. *Displaying Organizational Savvy:* Having a thorough understanding of military regulations and initiatives and carrying them out in accordance with Navy standards; following policies, regulations, and orders, and defending them to subordinates; understanding the chain of command, and accepting and respecting the decisions of superiors; displaying appropriate courtesies to superiors, peers, and subordinates; understanding how policies and actions fit into the overall mission scheme. *Embracing Personal and Professional Development:* Continuously improving professional skills, knowledge, and abilities through formal and informal training, off-duty education, on-the-job training, etc.; ability to find purpose, personal benefit, and growth in work; balancing self development and training with job completion such that performance does not suffer; maintaining superior technical skills through training.	*Development.* Continuously improving professional skills, knowledge, and abilities through formal and informal training, professional military education, off-duty education, on-the-job training, etc.; ability to find purpose, personal growth in work; balancing professional development and training with job completion such that performance does not suffer; maintaining superior technical skills through training. *Leading Innovation.* Being open to new ideas and new methods for accomplishing goals; adjusting to a rapidly changing environment and modifying goals and objectives based on emerging requirements; embracing innovation and looking for better methods/techniques to accomplish tasks; adapting to new and changing missions, tasks, and situations.	resources, and representing the unit/enterprise in dealing with other units/enterprises.

Figure 5.2. Components of military leader performance.

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Officer Performance Components = **Declarative Knowledge (DK)** x **Procedural Knowledge and Skill (PKS)** x **Motivation (M)**

Leads
- Leads others
- Extends influence beyond the chain of command
- Leads by example
- Communicates

Develops
- Creates a positive environment
- Prepares self
- Develops others

Achieves
- Gets results

- Job-specific task proficiency
- Non-job-specific task proficiency
- Written and oral communication task proficiency
- Demonstrating effort
- Maintaining personal discipline
- Facilitating peer & team performance

Common task knowledge

Branch-specific knowledge

Communication skills

Social/Interpersonal skills

Self-management skills

Leadership skills

Management skills

Technical skills

Choice to expend effort

Level of effort

Persistence of efforts

Figure 5.3. Leadership and non-leadership performance components in a model Army officer performance.

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Chapter 6. Summary and Next Steps

Summary

As noted in Chapter 1 (Figure 1.1), this project is the foundation for several research projects planned by ARI, including development of predictor and criterion measures for use in officer selection (accession) and classification (assignment). We identified what Army officers in several positions *do* to accomplish Army missions and objectives. We would argue that one aspect of being a "successful" Army officer involves performing well on the MDs that are most critical in any particular position. Another aspect of officer "success," at least from the Army's perspective, is remaining in the Army for as long as the individual can meaningfully and reasonably contribute to Army missions and objectives, particularly those who are better performers on the MDs critical for their position. Our qualitative and quantitative data suggest that MDs vary in importance depending on the officer's position and level. The quantitative results provide profiles of relative importance for platoon leaders and company commanders, positions that most officers hold at some point in their career. The results are more qualitative for defining the relative importance of MDs at higher-level positions, including battalion XO, battalion S3, and battalion commander. There are a number of other positions that officers may hold during their career and not every officer serves as a battalion XO, battalion S3, or battalion commander. Therefore, we do not have a profile of relative MD importance for every possible officer position. What we do have is a profile of one important officer career path.

We also identified a comprehensive list of SAOs that underlie performance of the MDs across levels and positions. Some of the SAOs are learned during training and/or on the job, for example, management skills. Others must be present at the time of entry into the Army in order for the individual to have the capability and motivation to develop into a successful Army officer. The latter are fundamental cognitive abilities, temperament characteristics, communication skills, and attitudes/values that align with the Army's culture and needs. Logically, officers who possess a higher level of these SAOs at time of accession will be better equipped to perform critical MDs, and thus will be more likely to succeed as an Army officer during initial training and throughout their Army career.

In the remainder of this chapter, we describe how the products of this effort can support ARI's planned follow-on research focusing on officer selection and assignment, along with some commentary on how the products could be used for other purposes.

Identifying SAOs for Selection

For officer accession (selection), it is necessary to identify SAOs important for all officer jobs, regardless of branch. If the Army cared only about predicting success at the earliest stages of an officer's career, for example, initial training or performance as a second lieutenant, then it would focus only on measuring basic cognitive abilities and temperament characteristics judged to be of high importance for the second lieutenant level. The current Army officer accession process does indeed tap into these domains, through standardized college entry exams such as the SAT and the ACT. As noted earlier, ARI is also conducting research to explore the validity

of measures of noncognitive attributes and of P-E fit (values, interests) for predicting performance and attrition in officer training. The latter efforts are longitudinal, and eventually ARI will be able to validate these measures against criterion measures such as performance in company grade or higher positions and retention past the ADSO. Some skills may also be appropriately measured in an entry-level accession process, for example, communication skills and social/interpersonal skills, but care should be taken to show that these measures are tapping a skill level that officer candidates have reasonably had an opportunity to develop.

It is clear that, in addition to predicting performance at the earliest stages of an officer's career, the Army also wishes to predict (a) performance at higher levels and (b) the likelihood of committing to an Army career. To predict performance at higher levels, the Army can consider measuring attributes deemed critically important for higher levels, even if these attributes are not necessarily highly important during initial officer training or early in the officer's career. Some of the basic attributes could be measured pre-accession as *indicators* of the likelihood of developing advanced skills, for example, an attribute like Motivation to Lead. Others are developed skills that officers will learn during officer training and on the job. Examples include the leadership and management skills identified as critically important for field grade officers. Measures of the more advanced skills could be considered in the officer promotion process, but probably should not be considered in the pre-accession selection process.

Identifying SAOs for Classification

There is a school of thought in the Army that "an officer is an officer" and that this consideration supersedes any need for branch specialization. This ideology suggests that officer selection is foremost in importance. Even so, ongoing ARI research suggests that (a) branch satisfaction varies greatly by branch and (b) there is considerable variability in training success across the branches. The branches with lower satisfaction ratings tend to also be the ones that have had high recycle rates in the Basic Officer Leadership Course B (BOLC B) over the years (Oliver, Ardison, Russell, & Babin, 2010). Improving the fit between newly commissioned officers and their branches could reduce training costs associated with poor performance.

SAOs that are differentially important across branches could be used in several ways to improve officer-branch fit. The most obvious way would be to use an assessment tool to qualify officers for particular assignments. Both the Air Force and the Navy have qualifying exams for officer assignments. Other tools might be developed that fit into the Army's current branching process. Currently, within the Army's ROTC and OCS officer accessioning programs, branch assignments are based on their performance during officer training, their branch preferences, and the needs of the Army. Performance is taken into account by giving higher-performing candidates higher priority in choosing a branch, although their choices are still constrained by the needs of the Army. Within this system, there may be some way to prequalify candidates and further limit their choices based on assessment scores, though these tools will likely need to focus on relatively broad knowledge domains, such as those included in the Armed Services Vocational Aptitude Battery (ASVAB)–Electronic Information, Mechanical Comprehension, and so on. Other tools, such as realistic job preview (RJP) or a self-assessed branch-fit exercise, might help officer candidates make better choices among the available branch options.

To identify branch-differentiating SAOs, it would be necessary to develop a clear SAO profile for each of a large number of branches. One way to do this would be to link the SAOs to the technical MDs for each branch, assuming that branch-specific technical duties could be identified for those same branches. However, as noted earlier, it will likely be difficult to develop detailed and stable lists of specific branch-specific technical duties until the transition to a modular brigade force has been completed and officer standards and training publications have been fully updated. Another possibility is to produce the SAO profiles based on broader descriptions of officer branch assignment, perhaps something more like a narrative job description that could be vetted by officers in the various branches. Expert judgment linkage exercises have been used for a similar purpose in other research projects (Agee et al., 2009; Houston, Borman, Farmer, & Bearden, 2005; Waters et al., 2009). The linkage results would provide an empirically grounded profile for each specialty or branch. We expect that branch differences would be most apparent in technical knowledge and skills, but there may be some differentiation across branches in the relative importance of different types of cognitive abilities, temperament characteristics, or communication or social/interpersonal skills.

Using MDs for Criterion Development

We believe the leadership and Army-Wide technical MDs provide a good foundation for developing multi-rater evaluation tools useful in validating predictor measures for officer selection purposes. In fact, we would argue leadership MDs specify core officer behaviors that must occur when carrying out branch-specific technical duties. In a rating tool, it may be sufficient to include a single overall technical performance rating dimension. We have used this approach in research with enlisted Army jobs, when we did not have access to or the resources to create, lists of specific technical duties performed in various enlisted occupations (Moriarty, Campbell, Heffner, & Knapp, 2008). For example, multi-rater tools typically ask raters to evaluate a ratee's performance on numerous, short behavioral statements, one of which could be an evaluation of technical performance. The rating scales are typically either absolute scales (e.g., rate effectiveness on a 7-point scale) or relative scales that ask for a comparison to the ratee's peers. It would be possible to collect input from Army SMEs regarding the amount of weight that should be placed on the single evaluation of technical performance, relative to the array of behavioral statements focused on leadership MDs. We expect that it will be possible to develop a core rating tool based on MDs common to all platoon leaders and company commanders, with supplemental items devoted to reflect changes in the level of complexity or accountability for field grade officers (i.e., battalion staff officers and battalion commanders). Therefore, we believe we have the base material necessary to measure performance across positions, branches, and levels. Of course, a more in-depth evaluation of technical knowledge could also prove useful, for example, a hands-on skill assessment or a job knowledge test.

To evaluate predictor measures used for officer assignment (classification), hands-on assessments or measures of job knowledge would be ideal, but we recognize that these types of assessments are labor-intensive to develop and administer, and require ongoing efforts to keep them up-to-date if they will be used over a period of time. A possible alternative is performance rating scales that focus on overall branch-specific technical performance for branches for which we could not develop detailed MDs. As noted above, we have developed such scales in research on enlisted MOS (Moriarty et al., 2008). For the Armor and Infantry branches, the draft branch-

specific MDs provide a starting point for multi-dimensional rating tools that involve several different aspects of technical performance. We can also use them to help derive branch-specific knowledge requirements, with the possibility of developing branch-specific job knowledge measures. To fully evaluate the effectiveness of an officer classification system, it will be necessary to identify branch-specific duties and knowledge requirements for a much larger number of branches. The results of this project provide one step in that direction.

Using MD-based Assessments to Predict Performance at Higher Levels of Leadership

As noted above, the MDs will serve as a foundation for developing criterion measures. At least some of the criterion measures could potentially be used as *predictors* of performance at higher levels of leadership. For example, past research using enlisted military samples shows that evaluations of job performance in lower ranks are predictive of job performance in higher ranks (Oppler, McCloy, & Campbell, 2001). Criterion measures used to collect evaluations of platoon leader and company commander performance could potentially be used to predict future performance as a battalion staff officer or as a battalion commander. Biodata or Training and Experience (T&E) type assessments could potentially be developed based on platoon leader or company commander MDs. The resulting scores could potentially be considered by promotion boards (assuming the assessments were properly validated).

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Appendix A

Information about Officer Branch Assignments

Information about Officer Branch Assignments

The Officer Career Model

The proposed work examined officer requirements at various points in their career. To fully understand the context of the specified points of focus, it is important to have an overall model of officer progression in mind. The following outlines such, based primarily on the Army's 45 active duty modular brigade combat team (BCT) structure. There are, naturally, some branch variations, and the following does not take into account table of distribution allowances (TDA) unit assignments. It does account for the vast majority of Army line officer utilizations.

Commissioning. There are three primary commissioning sources. The U.S. Military Academy (USMA) is relatively fixed, providing about 900 new officers annually. Normally, the Reserve Officer Training Corps (ROTC) program provides the bulk of the officer corps. Officer Candidate School (OCS) is traditionally the reactive source of commissioned officers, contracting in times of "normal" officer demands and expanding during peak demand periods. Currently, OCS is in an expansion mode with two sources of input: Soldiers already in service and college graduates, without prior service, who enlist specifically for OCS.

Branch Assignment. There are 16 branches available to newly commissioned line officers. Officers get to list their top 10 choices and every effort is made to provide one of the individual's top three choices. However, by regulation, one of those top three choices must be a Maneuver, Fire, and Effects (MFE) (combat) branch. Each commissioning source establishes order of merit lists (OML) which are supposed to establish priorities for granting branch assignment choices. However, all sources share equally in branch availability. Naturally, branch assignments are based on Army unit structure; there are, for example, more infantry slots than there are finance corps slots. To some extent, branch assignments are fungible and individuals may request branch swaps and reassignments if done before branch training begins.

Initial Training. The newly commissioned officer attends the Basic Officer Leader Course (BOLC). Until recently, the BOLC course was divided into two parts, a 6-week course common to all officers (called BOLC II), followed by a branch-specific course that varied in length depending on the branch (called BOLC III). Under the new training program, BOLC II and BOLC III are combined into a single course, which is offered at each of several Centers of Excellence (COE) that cover specific functional groupings, for example, maneuvers (Infantry and Armor branches). Additionally, many new officers also attend Ranger, Airborne, and other training courses such as Commo Officer or maintenance courses. With leave and class scheduling factored in, it is not unusual for new officers to spend their first 12 months of active duty in a training status.

Initial Assignment. New officers are usually assigned to positions within a BCT according to their branch with almost all assigned to battalions for duty as platoon leaders. The normal platoon leader duty tour is about 12 months, which is followed by duty as a company executive officer (XO) or as a secondary staff officer at battalion or brigade level. Promotion to O2 is at 18 months time in service (TIS) and is based on a" fully qualified" (noncompetitive) evaluation. Promotion is near 100%, Most new officers spend their "first tour" (initial 3-5 years) within the same initial assignment organization (BCT).

Company Command. Officers are promoted to O3, currently, at 38 months TIS. At between 4-6 years TIS, they will leave their initial assignment and attend the Captains Career Course (C^3). Following C^3, officers are typically returned to a BCT or a division organization and will serve about 15 to 18 months on division, brigade, or battalion staff. Assignment to company command follows, based on vacancy, and is controlled, usually, at the division level (with subordinate unit input). There are no DA-directed company command assignments. Virtually every career captain will get an opportunity at company command or an equivalency assignment based on branch. Company command normally lasts about 18 months.

Battalion Staff Major's Assignment. Promotion to O4 currently occurs at about 9 years TIS (down from an historical average of 11 years TIS). At the 6-8 year career point, officers must select a *functional area specialty* which may be very different from their branch and can dictate future assignments. At some point, majors will also attend intermediate level education (ILE), the third tier of the officer's Army based training and education. (ILE is normally a 10-month resident course and there is a 100% selection rate for majors.) Other than the commander, there are two field grade positions within battalions – the XO and the S3 (Operations Officer). Assignments to these positions are usually approved by the parent division and are usually limited to ILE graduates based on availability. Historically, about 60% of majors get a battalion field grade staff assignment, although there is a great deal of variation by branch.

Battalion Commander Assignment. Promotion to O5 normally occurs at about 16 years TIS. Selection for battalion command usually occurs between the 17th and 20th year of service. All battalion command selections are made by a centralized DA Board. The selection rate for battalion command has historically been about 60%, although at the O5 level there are increasingly more "constructive credit" assignments. Battalion command assignments generally last from 18 to 24 months.

Officer Branches

The Army Officer Personnel Management System (OPMS), a function of the Army Human Resources Command (HRC), is the system by which Army Officers are accessed, schooled, assigned, promoted and managed throughout their careers. Since the early 1990s, OPMS has gone through a near-constant period of evolution and new program initiations. Officer jobs are allocated across three *Functional Categories*:
- Maneuver, Fires, and Effects (MF&E)
- Operations Support (OS)
- Force Sustainment (FS)

The primary branches within each category are shown below. This is not an exhaustive list but it does cover the bulk of the officer population.

Maneuver, Fires, and Effects (MFE)
Branches:
    Armor
    Infantry
    Aviation

Field Artillery
Air Defense Artillery
Corps of Engineers
Chemical Corps
Military Police Corps

Operations Support (OS)
Branches:
Military Intelligence Corps
Signal Corps

Force Sustainment (FS)
Branches:
Transportation Corps
Ordnance Corps
Quartermaster Corps
Adjutant General Corps
Finance Corps
Medical Service Corps

An officer's branch assignment is based on (a) the preferences he/she lists in the Application for Appointment Branch and (b) the year-group needs of the Army for Branch officers. Each commissioning source (ROTC, OCS, USMA) establishes a class Order of Merit List (OML) based on distinctive source criteria and the OML establishes some type of priority in awarding branch selection choices, for example, based on student performance during early training. Even for in-service OCS trainees, the prior enlisted MOS appears to be only tangentially related to commissioning Branch (n exception being Aviation Warrant Officers attending OCS.)

Up until attendance at the branch qualifying school, branch assignments are fungible; that is, if a person is unhappy with their branch assignment, and they can find someone in their source and year group to trade with them, HRC will almost always approve the switch. After branch qualification, branch transfers are still possible; however they must have the approval of both the losing and gaining branch, as well as HRC. Voluntary branch transfers beyond 14 years service and the rank of major are normally not allowed. There are also involuntary branch transfers, most often when an officer's eligibility or qualification standing in a branch or FA changes.

Not all newly commissioned officers serve immediately in the branch they are commissioned in. Many officers are *branch detailed*. In the *branch detail program*, officers will serve either 2 years or 4 years in their detail branch and then return to their commissioning branch. For purposes of detailing, branches are divided into *donor branches* (Adjutant General, Finance, MP, MI, Ordnance, QM, Signal, and Transportation) and *recipient branches* (Air Defense, Armor, Chemical, Field Artillery, and Infantry). The use of the branch detail program is quite widespread, affecting several thousand newly commissioned officers each year.

Appendix B

List of Army Officer Skills, Abilities, and Other Characteristics (SAOs) with Importance by Rank

List of Army Officer Skills, Abilities, and Other Characteristics (SAOs) with Relative Importance by Rank

Attribute	Definition	Grade O1/O2	O3	O4	O5
COGNITIVE ABILITIES					
Verbal Reasoning	Is able to reason and draw conclusions based on verbal or written materials.	H	H	H	H
Quantitative Reasoning	Is able to solve problems that involve mathematical concepts or numbers.	M-H	M-H	H	H
Memory	Is able to retain and recall information.	H	H	H	H
Perceptual Speed and Accuracy	Is able to perceive things quickly and accurately, and to detect similarities or differences in objects, words or numbers.	H	H	M	M
Spatial Visualization	Is able to mentally visualize objects and imagine how they would be positioned if moved or rotated in different ways.	H	H	M	M
Spatial Orientation	Is able to orient oneself in an unfamiliar environment having few visual cues.	H	H	M	M
Psychomotor Ability	Is able to perform activities that require eye-hand coordination, or coordinating the simultaneous movements of one's limbs.	H	H	M	M-L
Attentiveness	Is able to focus on the problem or situation and shift attention between activities when appropriate.	H	H	H	H
Situational Awareness	Is able to perceive what is happening in the immediate environment, and how information, events, and actions will impact both current and near-term goals and objectives.	H	H	H	H

Attribute	Definition	Grade			
		O1/O2	O3	O4	O5
PHYSICAL ABILITIES					
Physical Strength	Is able to meet the physical strength demands of Army work (i.e., push, pull, carry, or throw objects; propel oneself).	H	H	M-H	M
Physical Endurance	Is able to exert oneself physically over long periods of time without getting winded or out of breath.	H	H	M-H	M
Coordination and Balance	Is able to maintain one's body position, even in an awkward or unsupported position. Can coordinate the movement of one's arms, legs, and torso when the whole body is in motion.	H	H	M-H	M
TEMPERAMENT					
Achievement Motivation	Sets high personal goals and standards, is enthusiastic and energetic, and strives for accomplishment.	H	H	H	H
Conscientiousness	Is reliable and dependable, attentive to details, values discipline and authority, and accepts responsibility.	H	H	H	H
Emotional Stability	Maintains balance, emotional composure, and mission focus in the face of adverse, stressful, or ambiguous situations. Quickly recovers from setbacks and adversity.	H	H	H	H
Health and Fitness Orientation	Desires to maintain good health and physical conditioning by making a priority of such things as good nutrition, physical exercise, and adequate sleep.	H	H	H	H

Attribute	Definition	Grade			
		O1/O2	O3	O4	O5
Initiative	Relies on own abilities to overcome obstacles, and is effective in situations that require a willingness to originate action or take independent action to achieve a goal.	M-H	H	H	H
Learning Orientation	Seeks out learning opportunities, enjoys acquiring new knowledge and skills, and is comfortable applying new knowledge and skills on the job.	H	H	H	H
Motivation to Lead	Seeks positions of authority, responsibility, and influence, is comfortable being in charge of a group or function, and is willing to make tough decisions and accept responsibility for unit performance.	M	M-H	H	H
Openness	Is open to new ideas and alternative ways of thinking.	L-M	M	M-H	H
Self-Efficacy	Is confident in the ability to succeed, effectively meet challenges, and overcome obstacles.	H	H	H	H
Team Orientation	Enjoys being part of a team, has a strong identification with one's team and other team members, and feels a sense of commitment and obligation to the team.	H	H	H	H
Traditional Values	Displays an acceptance of societal values, authority, and the value of discipline.	H	H	H	H

Attribute	Definition	Grade			
		O1/O2	O3	O4	O5
ARMY VALUES					
Duty	Displays a willingness to go beyond the minimum requirement in order to accomplish the mission.	H	H	H	H
Integrity	Displays moral courage and trustworthiness in one's decisions, actions, and dealings with others, resists the temptation to take advantage of one's authority, and is sensitive to the ethical impact of one's decisions.	H	H	H	H
Loyalty	Displays allegiance to the U.S. Constitution, the Army, one's unit, and other Soldiers.	H	H	H	H
Military Bearing	Presents a positive and professional image of self and the Army even when off duty. Maintains proper military appearance. Projects a commanding presence and a professional image of authority.	H	H	H	H
Physical Courage	Displays the ability to overcome fear of bodily harm and death when completing one's duty.	H	H	H	H
Respect	Treats others fairly, and with dignity and respect.	H	H	H	H
Selfless Service Orientation	Displays a commitment to the greater good of the team or group. Puts organizational goals ahead of individual goals.	H	H	H	H

Attribute	Definition	Grade			
		O1/O2	O3	O4	O5
COMMUNICATION SKILLS					
Active Listening	Carefully attends to and understands both overt and implied meaning of oral communications from others by accurately perceiving the content, context, and tone of the speaker.	H	H	H	H
Oral Communication	Speaks clearly and effectively in one-on-one and group settings, appropriately using gestures and other forms of nonverbal communication.	H	H	H	H
Written Communication	Communicates written information and ideas to others in a clear, accurate, concise, grammatically correct, and well-organized manner.	M	M-H	H	H
SOCIAL / INTERPERSONAL SKILLS					
Behavioral Flexibility	Changes one's own behavior, approach, or interpersonal style as appropriate.	M	M-H	H	H
Cultural Awareness	Demonstrates acceptance and understanding of individuals from other cultural and social backgrounds, both in the context of the diversity of U.S. Army personnel and interactions with foreign nationals during deployments or when training for deployment.	H	H	H	H
Perspective Taking	Understands how other people interpret events and interpersonal interactions.	M-H	H	H	H
Social Perceptiveness	Accurately perceives and understands other people's motives, attitudes, and feelings based on what they do or say, and accurately perceives one's own impact on the behavior of others.	H	H	H	H

Attribute	Definition	Grade			
		O1/O2	O3	O4	O5
Social Sensitivity	Displays diplomacy and tact when interacting with others.	M-H	H	H	H
SELF-MANAGEMENT SKILLS					
Self-Directed Learning	Strives to maintain continuous learning and training over one's entire career. Determines personal training needs, plans education and training experiences to meet them, and evaluates one's own level of mastery.	H	H	H	H
Self-Management	Effectively manages the full range of one's work and nonwork responsibilities (e.g., setting and prioritizing goals, allocating effort and personal resources, and assessing own performance).	M-H	H	H	H
LEADERSHIP SKILLS					
Directing and Supervising Others	Assigns subordinates specific tasks, and sets individual goals for work and assignments. Ensures that assignments are clearly understood. Monitors individual subordinate performance and gives appropriate feedback.	H	M-H	M	L-M
Motivating Others	Generates support, involvement, energy, and enthusiasm for the mission among subordinates and others using appropriate influence techniques (e.g., inspiration, role modeling, collaboration, persuasion, mentoring, conflict management, etc.).	L-M	M	M-H	H
Delegating	Appropriately delegates authority and responsibility for decision making, and for planning and executing tasks.	L-M	M	H	H
Shared Leadership	Organizes and orients team members to meet goals. Changes organization and focus of group to meet changing missions and conditions	H	H	H	H

Attribute	Definition	Grade			
		O1/O2	O3	O4	O5
Team Building	Assembles team of people that work together effectively. Identifies and effectively utilizes the appropriate mix of mission-relevant skills. Fosters group identity and cohesion by clearly communicating team goals, and encouraging and rewarding cooperation among team members.	L-M	M	M-H	H
Training and Developing Others	Determines the training needs of individual subordinates, providing the appropriate level of instruction, guidance, and developmental opportunities. Uses counseling to provide personal and developmental feedback.	H	H	M-H	M
MANAGEMENT SKILLS					
Adaptability	Able to modify behaviors and/or plans as necessary to reach goals. Maintains effectiveness in varying environments with various tasks, responsibilities, or people.	M-H	M-H	H	H
Coordinating	Able to coordinate the efforts of multiple, diverse groups to accomplish a mission.	L-M	M	M-H	H
Innovation	Develops and utilizes new and creative methods or strategies to accomplish work or achieve goals when established methods and procedures are inapplicable or ineffective.	L	L-M	M-H	H
Judgment and Decision Making	Makes decisions based on accurate and appropriate assessment of the costs/benefits and short- and long-term consequences of alternative actions and solutions, makes timely decisions even with incomplete information, while refraining from making hasty decisions in the absence of necessary information.	M-H	H	H	H

Attribute	Definition	Grade			
		O1/O2	O3	O4	O5
Planning and Organizing	Defines the means for achieving the unit or organization goals, establishes priorities, anticipates important or critical events, identifies resource requirements, and assigns responsibility and performance expectations for specific work.	L-M	M	H	H
Problem Solving	Able to identify complex problems, gather related information, evaluate information relevance, evaluate the credibility of alternative information sources, and generate alternative solutions.	L-M	M-H	H	H
Relationship Building	Develops and maintains effective working relationships with others. Understands how to leverage relationships to achieve objectives.	L-M	M	M-H	H
TECHNICAL SKILLS					
Common Task Knowledge and Skills	Possesses the necessary knowledge and skill to perform common tasks at the appropriate skill level.	H	H	H	H
Branch-Specific Knowledge and Skills	Possesses the necessary technical knowledge and skill to perform branch-specific technical tasks at the appropriate skill level.	H	H	H	H

Appendix C

List of Leadership Major Duties by Relevance for SST Levels

List of Leadership Major Duties by Relevance for SST Levels

Title	Definition	Relevance for Level [14]		
		D	O	S
1. Establish mission goals and objectives	Restates the higher headquarters' mission in terms appropriate to the organization. Establishes goals and objectives. Determines course(s) of action necessary to reach objectives and fulfill mission requirements.	H	H	H
2. Communicate mission goals and objectives	Explains how tasks support the mission and how the missions support the organizational objectives. Emphasizes the importance of organizational goals.	H	H	H
3. Direct others to work toward mission accomplishment	Uses direct influence techniques such as binding orders and legitimate requests to guide others toward mission accomplishment.	H	M	L
4. Influence others to work toward mission accomplishment	Uses indirect influence techniques such as bargaining and persuasion to motivate others toward mission accomplishment.	L-M	M-H	H
5. Establish and communicate professional standards	Communicates professional standards to subordinates and others. Reinforces the importance of maintaining professional standards.	H	H	M
6. Enforce performance requirements	Evaluates subordinates in a fair and consistent manner. Recognizes the difference between good, poor, and exceptional performance. Recognizes and rewards effective performance. Takes timely and appropriate steps to address performance problems. When necessary, takes action under the appropriate section of the Uniform Code of Military Justice (UCMJ).	H	H	M
7. Balance the requirements of mission with the welfare of followers	Assesses the impact of mission fulfillment on the mental, physical, and emotional welfare of subordinates. Monitors the morale, physical condition, and safety of subordinates. Provides appropriate relief when conditions jeopardize the success of the mission or present overwhelming risk to personnel.	M	H	M

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[14] SST Levels: Direct (D), Organizational (O), and Strategic (S). Relevance: High (H), Medium (M), and Low (L)

Title	Definition	Relevance for Level [14]		
		D	O	S
8. Build trust with other units within the Army	Acts in a firm, fair, and respectful manner to gain the trust of individuals in other Army units and groups within the Army line of authority. Acts in a manner consistent with the expectations of others. Keeps others informed of actions and outcomes that affect them.	H	H	H
9. Build trust with individuals, groups, and organizations outside the Army	Acts in a firm, fair, and respectful manner to gain the trust of individuals, groups, and organizations outside the Army. Identifies and leverages areas of communality with others. Engages others to establish mutually acceptable objectives and assign tasks.	M-H	H	H
10. Resolve conflict through consensus-building and negotiation	Assesses the situation to identify individual and group positions and needs. Identifies differences and similarities in the positions held by the various parties. Identifies individual and groups roles. Determines the resources available to facilitate conflict resolution. Helps each party understand others' positions. Generates or facilitates the generation of possible solutions. Leverages trust to establish agreements and acceptable courses of action.	L-M	H	H
11. Build and maintain working relationships with other Army units	Establishes and maintains effective working relationships with individuals, units, and groups within the Army.	H	H	H
12. Build and maintain working relationships with individuals, groups, and organizations outside the Army	Establishes contact and interacts with individuals, groups, and organizations outside the Army to facilitate mission accomplishment. Maintains friendships, interest groups, and support networks. Positively influences others' perceptions of the Army.	M	H	H
13. Model the Army Values and Warrior Ethos	Sets an example by displaying behaviors consistent with the Army Values. Exemplifies the Warrior Ethos and communicates to others how the Warrior Ethos is demonstrated.	H	H	H

Title	Definition	Relevance for Level [14]		
		D	O	S
14. Lead with confidence in adverse situations	Provides leader presence at the right time and place. Displays self-control, composure, and positive attitude, especially under adverse or confusing conditions. Shows resilience in the face of obstacles and setbacks. Remains decisive after discovering a mistake. Demonstrates willingness to act in the absence of guidance. Encourages subordinates when they show signs of weakness.	H	H	H
15. Model conceptual, analytic, and evaluative skills to others	Identifies critical issues to use as a guide in making decisions and taking advantage of opportunities. Generates innovative solutions. Relates and compares information from different sources to identify possible cause-and-effect relationships. Uses sound judgment and logical reasoning	M	M-H	H
16. Listen actively to others	Attentively observes people and events. Makes mental or written notes of important points or items of clarification. Attends to the content, emotion, and urgency of the message. Uses verbal and nonverbal means to reinforce one's interest. Reflects on new information before expressing views.	H	H	H
17. Communicate information appropriately and effectively	Identifies and uses the appropriate method of communication (memorandum, briefing, face-to-face meeting) for sharing information up, down, across, and outside the organization. When appropriate, coordinates communication plans with higher, lower, and adjacent individuals and affected organizations. Protects the confidentiality of information when appropriate. Keeps higher and lower headquarters, superiors, and subordinates appropriately informed.	H	H	H
18. Demonstrate cultural sensitivity in communication	Develops and maintains awareness of communication customs, expressions, actions, or behaviors appropriate to the situation or locale. Demonstrates respect for others from a different culture or background.	H	H	H

Title	Definition	Relevance for Level [14]		
		D	**O**	**S**
19. Foster effective teamwork and cooperation	Encourages others to work together effectively. Promotes teamwork and team achievement to build loyalty, cohesion, and trust. Draws attention to the consequences of poor coordination between interdependent individuals and groups. Recognizes and rewards successful team coordination. Integrates new members into the unit quickly.	M	H	M
20. Empower subordinates to exercise initiative and take ownership over work	Involves subordinates and others in decisions and keep them informed of consequences that affect them. Allocates responsibility for performance and decision making to the lowest appropriate level. Guides subordinate leaders in thinking through problems for themselves. Acts to expand and enhance subordinate's competence and self-confidence. Rewards subordinates for showing initiative.	H	H	H
21. Train and develop others	Uses effective assessment and training methods to foster the development of subordinates and others. Takes the time to show subordinates and others how to accomplish a new task. Encourages other leaders and their subordinates to reach their full potential. Motivates others to develop themselves. Expresses the value of interacting with others and seeking counsel.	H	H	L
22. Create an environment that fosters innovative and critical thinking	Establishes an environment that stimulates and supports subordinates and others that apply innovative and critical thinking to overcome obstacles and solve problems.	M	M-H	H
23. Encourage open communications and diverse points of view	Encourages subordinates and others to openly share candid opinions and concerns. Reinforces the expression of new ideas and contrary or minority viewpoints. Demonstrates a willingness to consider alternative perspectives to resolve difficult problems. Displays appropriate reactions to new or conflicting information or opinions. Guards against groupthink. Recognizes and discourages individuals seeking to gain favor from tacit agreement.	H	H	H

Title	Definition	Relevance for Level [14]		
		D	O	S
24. Create a fair and inclusive work environment	Demonstrates a belief in the value of equal opportunity. Encourages learning about and leveraging diversity. Communicates to subordinates and others that no form of harassment will be tolerated. Takes appropriate action to address harassment when it occurs.	H	H	H
25. Demonstrate a concern for people and their well-being	Ensures that subordinates and their families are provided for. Stands up for subordinates when appropriate. Routinely monitors subordinate morale and encourage honest feedback. Anticipates and monitors subordinates' on-the-job needs. Shows concern for the impact of tasks and missions on subordinates' morale.	H	H	H
26. Effectively deal with reasonable setbacks and failures	Communicates the difference between maintaining performance standards and a zero-defects mentality. Expresses the importance of being competent and motivated but acknowledges the occurrence of failure. Emphasizes learning from one's mistakes.	H	H	H
27. Maintain mental health and well-being	Identifies when one's own actions are inappropriate or out of balance. Applies logic and reason when making decisions or interacting with emotionally charged individuals. Identifies the sources of stress in the environment and take steps to cope effectively. Takes part in regular exercise, leisure activities, and time away from routine work. Stays focused on life priorities and values.	H	H	H
28. Demonstrate self-awareness and self-understanding	Uses self-observation and feedback from others to evaluate one's strengths and limitations. Learns from mistakes and makes corrections, if possible. Considers the outcome obtained by others who took similar actions in the past before acting. Seeks feedback on how one's actions affect others. Routinely evaluates progress toward personal goals. Demonstrates an understanding of the factors that impact self-motivation under various task conditions.	H	H	H

Title	Definition	Relevance for Level [14]		
		D	O	S
29. Engage in self-development activities	Sets aside time for self-development, reflection, and personal growth. Sets personal goals and evaluates progress toward them. Develops capabilities where possible. Accepts personal limitations. Seeks opportunities where capabilities can be used appropriately.	H	H	H
30. Expand knowledge of technical, technological, and tactical areas	Keeps informed about developments and policy changes inside and outside the organization. Seeks knowledge and information about both current and anticipated systems, equipment, capabilities, and situations. Establishes procedures to store knowledge for later use.	H	M-H	M-L
31. Expand conceptual and interpersonal capabilities	Learns new approaches to problem solving, based on the application of concentration, critical thinking (assimilation of information, discriminating relevant cues, question asking), imagination (decentering), and problem solving under different task conditions.	H	H	M
32. Develop and maintain cultural awareness	Takes the initiative to learn about the customs, values, beliefs, and patterns of thinking that influence others. Gathers information about similar encounters in the past where cultural considerations played a role in determining mission success and uses lessons learned to guide decisions in similar situations.	H	H	H
33. Assess current developmental needs of others	Observes and monitors subordinates under different task conditions to establish strengths and weaknesses. Notes change in the proficiency level of each subordinate.	H	H	H
34. Counsel, coach, and mentor others	Counsels subordinates to improve their job understanding and proficiency. Uses experience and knowledge to improve future performance. Counsels, coaches, and mentors subordinates, subordinate leaders, and others.	H	H	H

		Relevance for Level [14]		
Title	**Definition**	**D**	**O**	**S**
35. Facilitate the ongoing development of others	Maintains awareness of existing individual and organizational development programs. Assesses tasks and subordinates' motivation to identify the optimal method for developing subordinates and accomplishing the mission. Provides subordinates with job and training opportunities that help them improve in areas of developmental need. Encourages subordinates to pursue institutional learning opportunities. Provides information about institutional training and career progression to subordinates.	H	H	H
36. Prioritize, organize, and coordinate tasks for individuals, teams or other organizational units	Plans strategically to ensure that each course of action achieves the desired outcome. Identifies or establishes the groups and teams needed to accomplish work. Ensures that interrelated tasks are executed in the correct sequence, and that all tasks can be executed in the time available. Takes steps to limit the degree of task over-specification and micromanagement.	H	H	H
37. Matching individual and group capabilities and commitment to task	Conducts initial assessments when beginning a new task or assuming a new position. Considers capabilities and developmental needs of individuals and groups against the requirements of the task when making task assignments. Accounts for individual and group capabilities and commitment to task.	M	H	M
38. Identify, obtain, allocate, and manage resources	Allocates adequate time for task completion. Keeps track of people and equipment. Allocates time to prepare and conduct rehearsals. Continually seeks improvement in operating efficiency, resource conservation, and fiscal responsibility.	M	H	M
39. Remove work barriers	Protects the organization from unnecessary tasks and distractions. Identifies and resolves scheduling conflicts. Overcomes other obstacles that prevent full attention to accomplishing the mission.	H	H	M

Title	Definition	Relevance for Level [14]		
		D	O	S
40. Identify and leverage opportunities to improve individual, group, and organizational performance	Anticipates needs for action. Analyzes activities to determine how desired end states are achieved or affected. Acts to improve the organization's collective performance. Envisions ways to improve. Recommends best methods for accomplishing tasks. Leverages information and communication technology to improve individual and group effectiveness. Encourages staff to use creativity to solve problems.	H	H	H
41. Monitor and evaluate operational effectiveness	Gives and seeks accurate and timely feedback regarding the effectiveness of operations. Uses feedback to modify duties, tasks, procedures, requirements, and goals when appropriate. Uses assessment techniques and evaluation tools (such as AARs) to identify lessons learned and facilitate consistent improvement in operations.	H	H	M
42. Execute plans to accomplish the mission	Schedules tasks to meet all commitments in critical performance areas. Notifies peers and subordinates in advance when their support is required. Keeps track of task assignments. Adjust assignments if necessary.	H	H	M
43. Create and disseminate a vision of the future	Interprets data about the future environment, tasks, and missions. Forecasts probable situations and outcomes, and formulates strategies to prepare for them. Communicates to others the requirements, challenges, and opportunities the organization may face in the future.	L-M	M-H	H
44. Develop and maintain relevant geopolitical awareness	Takes the initiative to learn about non-U.S. societies that are experiencing unrest. Gathers and retains information about the Army influence on neutral countries, multinational partners, and enemies. Demonstrates awareness of the factors influencing conflict and peacekeeping, peace enforcing, and peacemaking missions.	H	H	H
45. Identify and adjust to external influences on the mission or organization	Gathers and analyzes relevant information about changing situations. Determines causes, effects, and contributing factors of problems. Considers contingencies and their consequences. Makes necessary, on-the-spot adjustments.	H	H	H

Title	Definition	Relevance for Level [14]		
		D	O	S
46. Make decisions that reflect an understanding of sphere of influence	Assesses situations, missions, and assignments to determine the parties involved in decision making, decision support, and possible interference or resistance. Determines the influence technique(s) most likely to result in achieving the desired outcomes.	M	M-H	H

Appendix D

List of Army-Wide Technical Major Duties for Platoon Leaders and Company Commanders

**List of Army-Wide Technical Major Duties for
Platoon Leaders and Company Commanders**

MD Title	Definition
1. React to nuclear, biological, chemical (NBC) hazards	React to NBC threats and conditions. Use protective gear and self protective measures. Operate in protective posture. Use NBC detection measures and equipment. Conduct immediate, operational, and thorough levels of decontamination.
2. Plan and direct the employment of mines and hand grenades	Plan and direct the emplacement and recovery of anti-personnel (Claymore) mines. Establish integrated protective perimeter with Claymore mines. Direct use of fragmentation, concussion, stun, incendiary, smoke, and riot control (CS) hand grenades.
3. Establish unit/individual proficiency in close quarter combat	Plan for inclusion of personal combatives training and the development of proficiency in hand-to-hand combat. Conduct offensive and defensive operations using armed and unarmed close quarter combat techniques.
4. Engage enemy with individual weapons and machine guns	Employ individual assigned weapons, and SAW, M240, and M2 machineguns, to engage and destroy enemy. Mount and employ night vision sights and aiming lights. Maintain weapons, machineguns, and auxiliary sighting equipment.
5. Determine location and conduct cross-country movement (mounted/dismounted)	Determine location on the ground using map (compass and protractor), terrain association, and position-location devices (hand-held and vehicular systems). Navigate from point to another point, dismounted/mounted. Move over, through, or around obstacles.
6. Prepare and occupy individual and unit fighting positions	Supervise selection, preparation, and occupation of temporary and improved positions. Enforce self and position camouflage. Integrate defensive fighting positions, observation and listening posts, and protective measures.
7. Perform combat lifesaving (CL) and evacuation	Evaluate a casualty, manage airway, treat penetrating chest trauma and decompress tension pneumothorax, control bleeding, initiate a saline lock, request MEDEVAC (transmit 9 line report), evacuate a casualty (mounted and dismounted). Recover and evacuate remains.
8. Perform tactical voice and visual communications	Prepare and submit SITREPs and SPOTREPs via voice and digital communications. Use visual signaling techniques to communicate.
9. Conduct security and control operations	Conduct checkpoint, entry, and traffic control operations. Conduct security and presence patrols. Establish security during mounted and dismounted movements and at halts. Perform detainee operations at point of capture.

MD Title	Definition
10. Supervise operator maintenance	Schedule and supervise operator maintenance of individual and unit equipment; vehicles, trailers, weapons, ammunition, communications equipment, clothing, protective equipment. Monitor supply system for repair parts and ensure repairs are completed. Conduct maintenance inspections.
11. Conduct urban operations	Perform movement operations in urban terrain and direct fire during urban operations. Recognize and react to urban threats. Conduct building and room entrance and clearing operations.
12. React to contact	React to contact (both mounted and dismounted): visual sightings, direct fire, indirect fire, sniper, RPG. React to ambush (near and far; mounted and dismounted). React to IED attack. Perform reaction battle drills. Conduct vehicle dismount reactions. Perform actions to break contact.
13. Defeat improvised explosive devices (IED)	Develop, maintain, and improve IED/UXO awareness and recognition. Identify and react to IED while mounted, dismounted, or in flight. Includes victim operated IED (VOIED), command wire IED (CWIED), remote detonated IED (RDIED), vehicle borne IED (VBIED), personal borne IED (PBIED), suicide vest IED (SVIED), female borne IED (FBIED), and deep buried IED.
14. Conduct field sanitation, preventive medicine, and accident prevention operations	Establish, enforce, and monitor conditions of heat, cold, vector (arthropods and rodents) control, water, food service, waste disposal, noise, environmental, and personal hygiene and cleanliness. Enforce weapons and vehicle safety. Conduct/perform vehicle roll-over reaction drills.
15. Maintain situational awareness (SA) and respond to threats	Develop and maintain SA by enhancing "human sensor" capabilities in self and others. Develop battle-focused physical and mental readiness. Recognize and respond to asymmetric threats. Assess and respond to threats by measured escalation of force. Apply, explain, and enforce rules of engagement (ROE).
16. Perform administrative, record keeping and correspondence requirements	Create, maintain, and monitor unit records and reports. Maintain files and records. Write and review letters, memoranda, and reports.
17. Establish and maintain accountability for property, equipment, and purchases	Establish and maintain unit procedures for hand receipts and accountability of individual and unit property, and for safeguarding and physical security of property. Establish and maintain sensitive item accountability. Conduct inventories and accountability inspections. Supervise expenditures, including cash and credit purchases or disbursements.

MD Title	Definition
18. Prepare, deliver briefings and presentations	Prepare and present briefings to senior officers and others. Conduct impromptu briefings and presentations. Conduct briefings with non-Army personnel and audiences. Respond to press interviews and requests.
19. Conduct risk assessment	Assess operation to determine the probability and severity of a potential loss due to a hazardous condition. Consider aspects of the situation, determine the risks, develop and implement controls, and evaluate effectiveness of controls making adjustments as necessary.
20. Employ, manage, and control unmanned aerial vehicles (UAV) and UAV support	Manage, utilize, and employ tactical unmanned aerial vehicle assets such as Raven and developmental micro-UAVS. Integrate UAV support into operational planning and execution. Utilize UAV results, downloads, and direct feeds.
21. Conduct reconnaissance, surveillance, and target acquisition (RSTA) operations	Plan and perform missions in support of commander's intelligence requirements. Conduct forward operations to collect identification, movement, early warning, or other tactical intelligence indicators. Plan and perform combat operations to destroy, neutralize, or suppress enemy intent, and to protect friendly forces and operations.
22. Engage enemy with mobile assault weapons	Employ direct fire weapons in operations. Conduct crew and unit operations employing major assault operations.
23. Operate combat vehicles	Employ and crew tactical combat vehicles including tanks, fighting vehicles (IVF, CFV), Stryker, up-armored HMMWV, MRAP, Fox, Buffalo in support of operations.
24. Plot information on maps and overlays	Use manual and electronic plots (e.g., BFT) to depict graphical plans and operations. Plot enemy information, friendly units, courses of actions (COA), alternatives, control features, branches and sequels. Integrate higher order graphics. Coordinate graphic plots with OPORDS.
25. Interact with indigenous individuals and groups	Interact with indigenous individuals and groups to impart and receive information and reactions. Interactions may be planned or spontaneous. Evaluate information for immediate operational application or long-term intelligence value.
26. Engage and negotiate with host nationals and local leaders.	Interact and meets with host nationals and local leaders (e.g., tribal, police chiefs) to obtain information, handle complaints, settle disputes, and resolve grievances between and among host nationals. Negotiate with host nationals to resolve conflicts with U.S. forces and to secure their support for U.S. military operations.

MD Title	Definition
27. Transport and load/unload cargo and personnel	Conduct transportation, resupply, and refuel operations. Plan for and supervise movement of cargo and personnel. Plan and execute convoy operations. Conduct off-road and tactical transport operations. Utilize general cargo and specialized hauling vehicles (PLS, HET, HETT).
28. Conduct mounted obstacle breaching	Plan breaching operations. Evaluate routes, bridges, obstacle locations. Execute breaches. Conduct in-stride minefield breaching.
29. Conduct mounted tactical movement operations	Plan and conduct mounted tactical road march. Control techniques of movement and movement formations. Move to and occupy an assembly area. Plan and occupy battle positions. Conduct overwatch and support by fire during movement.
30. Conduct mounted offensive operations	Plan and conduct mounted attacks and assaults as part of a combined arms force, company team, or task force. Conduct movement to contact and perform missions on contact. Provide direct fire support.
31. Conduct mounted defensive operations	Plan and conduct defensive operations as part of a combined arms force, company team, or task force. Occupy battle positions and strong points and conduct perimeter, zone, and area defensive operations.
32. Conduct tactical logistics operations in support of mounted forces	Plan for and conduct resupply, rearm, and refuel operations on the move and in consolidation operations. Utilize Forward Arm and Refuel Point (FARP) and LOGPAC distribution.

Appendix E

List of Army-Wide Technical Major Duties for Battalion S3s

List of Army-Wide Technical Major Duties for Battalion S3s

MD Title	Definition
1. Receive the mission	Receive the mission from higher headquarters.
	Alert all participants of the pending planning requirements, determine the amount of time available for planning and preparation, and decide on a planning approach, including guidance on design and how to abbreviate the military decision making process (MDMP).
2. Conduct operations mission analysis for the battalion	Analyze the commander's mission and intent from the brigade order. Conduct terrain analysis. Assess mission requirements and recommend additional resources if required. Identify maneuver tasks. Recommend task organization and assign tasks to subordinate elements of command. Develop initial mission statement. Conduct mission analysis brief.
3. Prepare operations battle staff estimate	Maintain current operation estimate of situation in coordination with other staff officers. Recommend priorities for allocating critical resources. Project status of unit, relative type of operation.
4. Integrate battalion battle staff planning	Integrate battlefield functions into the concept of operations. Integrate special staff officers into the MDMP. Coordinate with each principal staff officer to ensure that the mission analysis information is clear and concise. Exercise staff supervision over EW, PSYOPS, OPSEC, CMO, deception activities, and rear area protection. Integrate all combat, CS, and CSS assets. Evaluate possible enemy course of actions (COAs) identified by S2.
5. Coordinate development of the battalion intelligence, reconnaissance, and surveillance plan (ISR)	Develop task force ISR plan with the S2 and FSO. Approve the ISR plan and supervise ISR activities with the S2's assistance on all available collection assets. Develop counter reconnaissance plan with input from S2 and fire support officer (FSO).
6. Develop COA	Brief on the commander's guidance. Receive enemy event templates from the S2 section. Complete combat power analysis by analyzing the relative force ratios developed during mission analysis and array initial forces. Complete the concept of operations. Determine command and control means and minimum required maneuver control measures. Identify and assess risks and hazards. Prepare course of action statements.
7. Evaluate and analyze courses of action (COAs)	Participate in staff wargaming of COAs (lead if XO is not available). If time permits, compare and analyze several COAs before arriving at a decision on which one to execute.
8. Conduct operational rehearsals	Review decision points (DPs). Prepare rehearsal script. Monitor sequence of events. Drive unit/task force rehearsals. Maintain synchronization matrix. Address problems identified during rehearsal. Write draft FRAGO for XO and battalion commander approval.

MD Title	Definition
9. Prepare battalion operations orders	Coordinate with battalion staff officers for information to incorporate into battalion operations order. Prepare, authenticate, and publish operations plans and orders; and review plans and orders of subordinate units. Obtain commander's approval of OPORD. Direct any changes of OPORD.
10. Locate and operate the tactical command post (TAC CP)	Recommend the general locations of command posts. Design the command and control structure to control operations. Annotate the location selected on the COA sketch. Determine appropriate triggers for the TAC CP to relocate. Determine whether TAC CP needs to pre-position any equipment at the site.
11. Manage tactical information during battalion operations	Monitor and evaluate status of subordinate units. Track and interpret the events in adjacent (flank) units. Coordinate and control timing and execution of battalion battle.
12. Synchronize fires and close air support (CAS) at battalion level	Anticipate and initiate the employment of CAS, indirect fires, and scatterable mines.
13. Manage use of terrain and airspace	Allocate terrain by establishing areas of operation, designating assembly areas, and specifying locations for units and activities to deconflict activities that might interfere with each other. Coordinate airspace users for concurrent employment in the accomplishment of assigned missions.
14. Establish battalion battle focused training management program	Identify training requirements based on combat and garrison missions and the training status of the unit. Ensure that training requirements for combat are oriented on conditions and standards of combat. Prepare and carry out training programs, directives, and orders; and plan and conduct field exercises. Organize and conduct internal schools, and obtain and allocate quotas for external schools. Plan and conduct training inspections, tests, and evaluations.
15. Assist battalion commander in development of commander's critical information requirements (CCIR)	Discuss with the commander visualization of the battle. Brief S3 section on the commander's visualization. Direct S3 section to develop information requirements (IRs). Consolidate the IR from other staff sections with the IR from the S3 section. Direct refinement of IR into CCIR. Nominate CCIR to the battalion commander at the mission analysis brief.
16. Assist battalion commander in directing current operations	Compare common operational picture (COP) with the decision support matrix (DSM) and synchronization matrix. Determine if the ongoing operation is proceeding according to the current OPORD. Evaluate criteria for mission success. Compare assessment of current operations with the commander.

MD Title	Definition
17. Assist battalion commander in directing intelligence, surveillance, and reconnaissance operations	Monitor ISR operations to determine whether the information collected meets the requirements of the battalion. Direct S3 section to coordinate infiltration/exfiltration of the battalion reconnaissance troop (BRT) and other ISR assets. Evaluate combat information and intelligence reported by the BRT and other ISR assets. Direct S2 section and MI company to analysis control team (ACT) to analyze combat information and intelligence reported by BRT and other ISR assets. Coordinate with higher and/or lower HQ for reconnaissance handover (RHO) between ISR assets.
18. Assist commander in supervision of subordinate unit preparation	Evaluate entire OPORD from the subordinate unit. Identify tasks that must be performed by subordinate unit. Supervise accomplishment of subordinate unit tasks.
19. Conduct operational coordination and liaison with higher and adjacent units	Ensure the executive officer (XO) has designated liaison officers (LNOs). Brief LNOs to ensure they are familiar with all aspects of operations. Assess and interpret tactical situation and provide periodic synopsis to commander, staff, adjacent. lower, and higher units.
20. Provide operations input to the battalion risk management	Apply the risk management process during each phase of the MDMP. Advise commander/staff on risk management trends and deficiencies in unit safety program. Supervise implementation of risk management process at battalion level. Assess risk or safety hazards identified during operations.
21. Maintain battalion records	Prepare operational records and reports. Compile training records and reports. Maintain unit readiness status of each unit in the command.

Appendix F

List of Army-Wide Technical Major Duties for Battalion XOs

List of Army-Wide Technical Major Duties for Battalion XOs

MD Title	Definition
1. Assist the commander in directing combat operations	Take command of the force when the commander is unable to command. Take command of a portion of the force under special missions (retrograde operations, obstacle crossings).
2. Direct and supervise staff planning	Manage and coordinate the staff's work and provide quality control during the MDMP. Ensure the commander's intent and guidance is implemented during the process. Provide timelines to the staff, establish briefing times and locations, and provide any instructions necessary to complete the plan.
3. Establish, manage, and enforce the staff planning time line, per the commander's guidance	Ensure that staff information products to support the commander's decisions are provided in accordance with the unit standing operating procedures, or the commander's directed planning timeline. Adjust the planning timeline to reflect actual or anticipated changes in the tactical situation.
4. Integrate and synchronize plans and orders	Coordinate with higher HQ to obtain planning information for future or planned operations. Request guidance from the commander to plan future operations. Provide planning guidance to the battle staff. Direct the collaborative planning effort, if required. Direct the staff to begin mission analysis for the parallel planning effort. Request higher HQ planning products that are normally not provided to subordinate units. Direct the staff to conduct the remainder of the MDMP.
5. Maintain a near-identical visualization of operations, events, and requirements with the commander	Maintain knowledge of all directives, orders, and instructions that the commander issues to the staff, subordinate commanders, and subordinate units, and verify execution. Monitor staff estimates and reports transmitted to the commander and/or higher and adjacent headquarters.
6. Monitor and assess current operations	Compare the progress of the operation presented by the common operational picture with: the decision support matrix, synchronization matrix, and/ or other execution information; the commander's concept of the operation, including the commander's intent; measures of effectiveness and measures of performance; and other information as appropriate to determine if adjustment decisions are required. If adjustment decisions are required, then determine whether the commander needs to be involved (a major adjustment) or not (minor) based on the commander's delegation of decision-making authority.
7. Monitor the staff's discipline, morale, and operational readiness	Ensure that staff personnel are receiving administrative needs (awards, pay, promotion) and sustainment (rations, medical, religious) from the headquarters company commander. Ensure that staff personnel are complying with all command directives and policies. Ensure that staff personnel are maintaining their sleep plan, individual equipment, and physical fitness.

MD Title	Definition
8. Provide direct supervision to the command post and headquarters cell, including displacement, protection, security, and communications	Direct the staff to identify locations for the main CP and to determine displacement requirements. Assist the commander in synchronizing the battle from the main CP. Disseminate intelligence updates to division, battalion, commander, and subordinate units. Direct combat service support assets to assist unit with resupply and maintenance. Inform commander of unit capabilities. Direct transfer of command and control functions to alternate CPs. Confirm that the TAC CP or other alternate CP is controlling operations before ceasing operations at the main CP.
9. Supervise all tasks assigned to the staff	Manage all staff activities and ensure their completeness, accuracy, and timeliness. Assign responsibilities for tasks among staff sections and command posts. Adjust unit standard operating procedures during execution to specify a change in staff responsibilities based on the situation, expertise, and capabilities of the staff as requirements arise or are forecast.

Appendix G

List of Army-Wide Technical Major Duties for Battalion Commanders

List of Army-Wide Technical Major Duties for Battalion Commanders

MD Title	Definition
1. Develop and sustain a training plan for the battalion.	Establishes and enforces a unit training philosophy. Reviews brigade or higher headquarters mission essential task list (METL). Plans and trains as a combined arms team with associated slice elements (e.g., artillery, engineers, logistics, and aviation). Allocates sufficient time for subordinate commanders to train and develop their Soldiers.
2. Establish and clarify specific duties and responsibilities expected of key members of the battalion team.	Communicates specific responsibilities and functions to the executive officer (XO), operations officer (S3), command sergeant major, company/battery commanders, first sergeants, and chaplain. Requires staff members to become expert in his/her assigned area of responsibility. Maximizes use of doctrinal material for TRADOC and service schools.
3. Cultivate relationships with key members of the brigade.	Keep the brigade commander informed of the battalion status. Communicate regularly with fellow battalion commander to share information, exchange ideas, and build support. Seek legal advise for the Staff Judge Advocate (e.g., to screen Article 15 specifications, memoranda of reprimand, command policy letters) or Inspector General (IG) when necessary.
4. Develop/adapt and enforce tactical operations center standard operating procedures (SOP).	Develop or adapt a TAC SOP that is concise and brief, reduces size of operations orders, is consistent with higher headquarters' SOPs, is applicable to all Soldiers in the command, and is a reliable source for report formatting required of subordinate and higher headquarters.
5. Train and exercise the battle staff.	Conduct battle staff drills regularly (e.g., monthly, bi-monthly). Require all staff briefing (garrison and filed) to be done in an established format. Seek opportunities to train with adjacent units during training exercises. Rehearse battle staff functions in various tactical operations center configurations. Set up and enforce a command sleep plan.
6. Conduct live fire exercises	Designs training exercises to be realistic and challenging. Personally conducts risk assessment before each live fire maneuver exercise. Assigns sectors of fire/responsibility and enforces troop leading procedures. Attends live fire maneuver exercises and requires battle staff to participate. Conducts backbriefs. Certifiesies crews quarterly to ensure they are trained, ready, and disciplined.
7. Create and enforce a command maintenance program.	Establishes dedicated training objectives to teach Soldiers and Leaders how to do unit level maintenance. Includes maintenance on training schedules. Regularly checks on motor pools, arms rooms, supply rooms, and commo rooms. Establishes and adheres to a rigorous maintenance recovery program following all deployments.

MD Title	Definition
8. Develop a mission analysis plan and issue commander's guidance to the staff.	Issues guidance on courses of action to consider. Identifies mission essential tasks and purposes. Presents the restated mission. Develops and issues commander's intent and concept of operations. Identifies priorities. Modifies and/or approves the time plan. Decides the type of order and rehearsal. Provides critical information requirements to the staff.
9. Conduct course of action development.	Conducts map reconnaissance of the area of operations to determine preliminary movement requirements. Coordinates with battle staff to identify assembly areas, routes sectors, unit locations, staging areas, etc. Coordinates with combat service support battalion commander and S4 to identify main supply routes, initial routes, positioning of trains and release points.
10. Determine a maneuver course of action.	Selects wargaming method and participates in wargaming of COAs. Identifies critical events for the staff. Discusses mission with maneuver, combat support, and combat service support commanders. Approves, modifies, or directs a COA based on considerations of higher intent and mission, force status, latest intelligence, supportability, and risk factors.
11. Produce a battalion operations order.	Coordinates with the XO and S3 to review mission statement, commander's intent, concept of the operation, task force tasks, and synchronization matrix in the brigade operations order. Coordinates with combat support staff and S3 to ensure fires are synchronized with, and support, maneuver. Reviews and approves the brigade concept for support. Approves the final operations order.
12. Directs and controls rehearsal of battalion mission.	Directs maneuver personnel to describe engagement areas, control measures, reporting on control measures, movement rates, axis of advance, and limits of advance. Directs combat support personnel to describe displacement of artillery, air defense coverage, and close-air support. Directs combat service support personnel to describe logistical replacement, subsequent moves to sustain maneuver, and land management. Verifies the synchronization matrix.
13. Controls execution of battalion mission.	Makes maneuver decisions during key points in the battle. Decides how and when to commit the main effort task force (TF). Decides the mission and orientation of the supporting TF to reinforce and sustain main TF. Issues orders to subordinate units to counter enemy actions.

Appendix H

**Armor Branch-Specific Technical Major Duties for Platoon Leaders
and Company Commanders**

Armor Branch-Specific Technical Major Duties for
Platoon Leaders and Company Commanders

Table H.1. Technical MDs for Tank Platoon Leader

MD Title	Definition
1. Conduct battle command planning and mission preparation	Execute the 8 steps of Troop Leading Procedure (TLP). Conduct pre-combat checks and inspections.
2. Conduct offensive operations	Plan and coordinate an attack by fire, ambush, raid, assault. Conduct tactical formation/movement/maneuver in support of offensive operations.
3. Conduct operations with combined arms and other forces	Plan and coordinate offensive and defensive operations as part of an infantry team in a light battalion/heavy platoon or light/company/heavy section mix, or in support of a mechanized infantry unit.
4. Conduct sustainment operations	Ensure field maintenance and sustainment maintenance activities, and provide for property accountability and safeguarding of platoon assets. Conduct platoon consolidation, reorganization, rearm/refuel, evacuation, and LOGSTAT reporting following offensive or defensive engagements. Evacuate EPWs.
5. Conduct Soldier support operations	Coordinate and monitor Soldier medical treatment, relief and evacuation, physical health, hygiene, field sanitation, counseling, mental health.
6. Conduct stability operations	Communicate through an interpreter. Conduct engagements and tactical questioning with local civil leaders (e.g. tribal, police). Control civilian movement. Conduct tactical site exploitation. Support restoration or creation of essential services.
7. Conduct security operations	Conduct screen, local, and area security. Conduct direct fire planning.
8. Conduct training operations	Supervise a unit manning roster. Prepare a training schedule; design/supervise short range and gunnery training; develop battle-focused training. Develop physical fitness program. Conduct rehearsals.
9. Use and integrate combat multipliers	Plan and support Army Aviation, Engineer, Civil Affairs, Tactical Psychological Operations (PSYOP), Air and Missile, and CBRNE operations.

MD Title	Definition
10. Conduct tactical operations	Conduct actions in assembly areas. Conduct linkup, relief in place, passage of lines, cordon and search. Direct establishment of base camp. Work with engineer support. Conduct roadblocks or checkpoints.
11. Conduct defensive operations	Plan and coordinate a defense in sector. Conduct a hasty defense, withdrawal, support by fire. Conduct tactical formation/movement/maneuver in support of defensive operations.
12. Conduct intelligence/reconnaissance operations	Plan and conduct zone, area, and route reconnaissance. Conduct surveillance, and process tactical information at a platoon level.
13. Conduct tank movement	Conduct breaching operations; conduct overwatch/support by fire. Conduct a tactical road march, area security, and assembly area activities.
14. Operate as Member of a Tank Crew	Execute crew drills, and perform tank crew PMCS. Perform vehicle tactical navigation and direct movement. Issue fire commands/direct tank main gun/machine gun engagements. Engage targets with tank commander's weapon/CWS. Operate vehicle communications, information systems, CID and CITV.
15. Conduct indirect fire support and CAS/CCA missions	Plan and execute operations with indirect fire support. Mark positions and locations during CAS/CCA missions, and coordinate response with Army aviation assets.

Table H.2. Technical MDs for Tank Company Commander

MD Title	Definition
1. Conduct battle command planning and mission preparation	Execute the 8 steps of Troop Leading Procedure (TLP). Conduct pre-combat checks and inspections.
2. Conduct offensive operations	Plan and coordinate ambush, raid, assault. Conduct tactical formation/movement/maneuver in support of offensive operations.
3. Conduct operations with combined arms and other forces	Plan and coordinate offensive and defensive operations as part of an infantry team in a light battalion/heavy platoon or light/company/heavy section mix, or in support of a mechanized infantry unit.
4. Conduct sustainment operations	Ensure field maintenance and sustainment maintenance activities, and provide for property accountability and safeguarding of company assets. Conduct company consolidation, reorganization, rearm/refuel, evacuation, and LOGSTAT reporting following offensive or defensive engagements. Evacuate EPWs.
5. Conduct Soldier support operations	Coordinate and monitor Soldier medical treatment, relief and evacuation, physical health, hygiene, field sanitation, counseling, mental health.
6. Conduct stability operations	Communicate through an interpreter. Conduct engagements and tactical questioning with local civil leaders (e.g. tribal, police). Control civilian movement. Conduct tactical site exploitation. Support restoration or creation of essential services.
7. Conduct security operations	Conduct screen, local, and area security. Conduct direct fire planning.
8. Conduct training operations	Supervise a unit manning roster. Prepare a training schedule; design/supervise short range and gunnery training; develop battle-focused training. Develop physical fitness program. Conduct rehearsals.
9. Use and integrate combat multipliers	Plan and support Army Aviation, Engineer, Civil Affairs, Tactical Psychological Operations (PSYOP), Air and Missile, and CBRNE operations.

MD Title	Definition
10. Conduct tactical operations	Plan and conduct actions in assembly areas. Conduct linkup, relief in place/battle handover ops, passage of lines, cordon and search. Direct establishment of base camp. Work with engineer support. Conduct roadblocks or checkpoints.
11. Conduct defensive operations	Plan and coordinate a defense in sector. Conduct a hasty defense, withdrawal, support by fire. Conduct tactical formation/movement/maneuver in support of defensive operations.
12. Conduct intelligence/reconnaissance operations	Plan and conduct zone, area, and route reconnaissance. Conduct surveillance, and process tactical information at a company level.
13. Conduct fire support and CAS/CCA missions	Engage targets with close air support (CAS)/CCA and plan fire support at troop level.
14. Conduct mobility operations	Plan and conduct breaching operations. Conduct movement across a CBRNE contaminated area. Supervise unit response to a nuclear attack. Prepare obstacle plan, conduct hasty water/gap crossing, and coordinate minefield clearance.

Table H.3. Technical MDs for Cavalry Platoon Leader

MD Title	Definition
1. Conduct battle command planning and mission preparation	Execute the 8 steps of Troop Leading Procedure (TLP). Conduct pre-combat checks and inspections.
2. Conduct offensive operations	Plan and coordinate an ambush, raid, and assault. Conduct tactical formation/movement/maneuver in support of offensive operations.
3. Conduct operations with combined arms and other forces	Plan and coordinate operations as part of an infantry team in a light battalion/heavy platoon or light/company/heavy section mix, or in support of a mechanized infantry unit.
4. Conduct sustainment operations	Ensure field maintenance and sustainment maintenance activities, and provide for property accountability and safeguarding of troop assets. Conduct troop consolidation, reorganization, rearm/refuel, evacuation, and LOGSTAT reporting following offensive or defensive engagements. Evacuate EPWs.
5. Conduct Soldier support operations	Coordinate and monitor Soldier medical treatment, relief and evacuation, physical health, hygiene, field sanitation, counseling, mental health.
6. Conduct stability operations	Communicate through an interpreter. Conduct engagements and tactical questioning with local civil leaders (e.g. tribal, police). Control civilian movement. Conduct tactical site exploitation. Support restoration or creation of essential services.
7. Conduct security operations	Conduct screen, local, and area security. Conduct direct fire planning.
8. Conduct training operations	Supervise a unit manning roster. Prepare a training schedule; design/supervise short range and gunnery training; develop battle-focused training. Develop physical fitness program. Conduct rehearsals.
9. Use and integrate combat multipliers	Plan and support Army Aviation, Engineer, Civil Affairs, Tactical Psychological Operations (PSYOP), Air and Missile, and CBRNE operations.

MD Title	Definition
10. Conduct tactical operations	Occupy and conduct actions in assembly areas. Conduct linkup, relief in place/battle handover ops, passage of lines, cordon and search, observation posts, dismounted patrols, and patrol bases and combat outpost operations. Work with engineer support. Coordinate indirect fires and intelligence gathering.
11. Conduct defensive operations	Plan and coordinate a defense in sector. Conduct a hasty defense, withdrawal, and support by fire. Conduct tactical formation/movement/maneuver in support of defensive operations.
12. Conduct reconnaissance operations	Use sensor, aerial, mounted, and dismounted reconnaissance methods to achieve the commander's intent. Conduct route, area, and zone reconnaissance.
13. Conduct tactical movement	Use movement techniques and formations, along with IPB in support of reconnaissance and surveillance operations and to minimize chance contact with enemy forces. Use terrain for cover and concealment, and use caution at danger areas (open, wooded, and urban). Dismount vehicles. Upon chance contact with enemy forces, maintain contact to support attack by friendly unit.
14. Conduct indirect fire support and CAS/CCA missions	Plan and execute operations with indirect fire support. Mark positions and locations during CAS/CCA missions, and coordinate response with Army aviation assets.

Table H.4. Technical MDs for Cavalry Troop Commander

MD Title	Definition
1. Conduct battle command planning and mission preparation	Execute the 8 steps of Troop Leading Procedure (TLP). Conduct pre-combat checks and inspections.
2. Conduct offensive operations	Conduct an ambush, raid, and assault. Conduct tactical formation/movement/maneuver in support of offensive operations.
3. Conduct operations with combined arms and other forces	Plan and coordinate operations as part of an infantry team in a light battalion/heavy platoon or light/company/heavy section mix, or in support of a mechanized infantry unit.
4. Conduct sustainment operations	Ensure field maintenance and sustainment maintenance activities, and provide for property accountability and safeguarding of troop assets. Conduct troop consolidation, reorganization, rearm/refuel, evacuation, and LOGSTAT reporting following offensive or defensive engagements. Evacuate EPWs.
5. Conduct Soldier support operations	Coordinate and monitor Soldier medical treatment, relief and evacuation, physical health, hygiene, field sanitation, counseling, mental health.
6. Conduct stability operations	Communicate through an interpreter. Conduct engagements and tactical questioning with local civil leaders (e.g. tribal, police). Control civilian movement. Conduct tactical site exploitation. Support restoration or creation of essential services.
7. Conduct security operations	Conduct screen, local, and area security. Conduct direct fire planning.
8. Conduct training operations	Supervise a unit manning roster. Prepare a training schedule; design/supervise short range and gunnery training; develop battle-focused training. Develop physical fitness program. Conduct rehearsals.
9. Use and integrate combat multipliers	Plan and support Army Aviation, Engineer, Civil Affairs, Tactical Psychological Operations (PSYOP), Air and Missile, and CBRNE operations.

MD Title	Definition
10. Conduct tactical movement	Use movement techniques and formations, along with IPB in support of reconnaissance and surveillance operations and to minimize chance contact with enemy forces. Use terrain for cover and concealment, and use caution at danger areas (open, wooded, and urban). Dismount vehicles. Upon chance contact with enemy forces, maintain contact to support attack by friendly unit.
11. Conduct defensive operations	Conduct a defense in sector. Conduct a hasty defense, withdrawal, and support by fire. Conduct tactical formation/movement/maneuver in support of defensive operations.
12. Conduct reconnaissance operations	Use sensor, aerial, mounted, and dismounted reconnaissance methods to achieve the commander's intent. Conduct route, area, and zone reconnaissance. Plan and conduct reconnaissance handover operations.
13. Conduct tactical operations	Occupy and conduct actions in assembly areas. Conduct linkup, relief in place/battle handover ops, passage of lines, cordon and search, observation posts, dismounted patrols, and patrol bases and combat outpost operations. Coordinate indirect fires and intelligence gathering.

Appendix I

**Infantry Branch-Specific Technical Major Duties for Platoon Leaders
and Company Commanders**

Infantry Branch-specific Technical Major Duties for
Platoon Leaders and Company Commanders

Table I.1. Technical MDs for Infantry Platoon Leader

MD Title	Definition
1. Conduct infantry platoon troop leading procedures (TLP)	Receive, understand, and implement the combat order. Conduct the 8 steps of TLP. Perform precombat checks and inspections.
2. Perform infantry platoon operations risk management assessment and fratricide avoidance	Assess tactical and accidental risks of loss of personnel and equipment. Minimize fratricide conditions through positive weapons control and enforcement of engagement criteria. Verify and enforce recognition controls.
3. Conduct light infantry platoon tactical movement	Perform tactical movement not in contact, utilizing foot marches and motor movements. Select movement formations and move by travelling, travelling overwatch, and bounding. Transform from movement to maneuver. Select routes and navigate during movement. Conduct movement independently or as part of a larger force. Move to and occupy assembly areas.
4. Conduct heavy infantry platoon tactical movement	Conduct tactical movement, not in contact, with IFV or Stryker combat vehicles. Select and alter movement formations based on vehicles, terrain, and tactical situation. Move by travelling, travelling overwatch, and successive or alternate bounds. Conduct immediate action drills on contact or in danger areas. Select section routes and positions and navigate during movement. Coordinate section displacement. Conduct movement independently or as part of a larger force. Move to and occupy assembly areas.
5. Plan and develop infantry platoon offensive operations	Plan offensive operations as part of a larger force. Plan for base of fire and maneuver elements. Incorporate intelligence, reconnaissance, fire support, and sustainment. Include civilian population considerations. Conduct both contiguous and noncontiguous offensive operations.
6. Conduct infantry platoon movement to contact (MTC)	Conduct movement to contact as part of a larger force. Perform as MTC reconnaissance or surveillance element. Execute MTC approach march or search and attack, mounted or dismounted.
7. Perform infantry platoon actions on contact	Execute offensive tactical tasks in reaction to the enemy. React as an independent platoon or on order, as part of a larger force in reaction to the enemy. Seize or clear objectives, positions, or terrain features or buildings. Suppress enemy locations or support or attack by fire.

MD Title	Definition
8. Conduct infantry platoon attacks	Conduct mounted and dismounted deliberate attacks as part of a larger force. Conduct deliberate attacks on moving or stationary enemy or on terrain objectives. Conduct hasty attacks utilizing base of fire and maneuver. Conduct specialized attacks including ambush, raids, and counterattacks.
9. Conduct infantry platoon operations in urban terrain	Conduct limited attacks and clearing operations in urban areas. Isolate individual buildings. Conduct building assaults; enter and penetrate buildings. Conduct room clearing operations. Mark cleared areas.
10. Plan and develop infantry platoon engagement area (EA)	Plan mounted and dismounted EA operations as part of a larger force. Identify enemy avenues of approach and scheme of maneuver. Determine kill zones and trigger points. Plan and integrate obstacles and indirect fires. Emplace weapons systems and conduct EA rehearsal.
11. Conduct infantry platoon defense	Execute mounted and dismounted defense. Conduct area, BP, strongpoint, and perimeter defenses. Occupy primary, alternate, supplementary, and subsequent battle positions. Prepare and occupy defensive fighting positions. Establish TRPs, OPs/LPs. Execute withdrawal and delay operations.
12. Prepare and conduct infantry platoon patrols	Conduct patrols with and without combat vehicle support. Organize and conduct combat and reconnaissance patrols. Conduct area, route, and zone reconnaissance. Prepare a platoon patrol plan and supervise squad and team preparation. Conduct presence patrols in populated areas. Conduct raids and ambushes.
13. Conduct infantry platoon operations with tanks and other combat vehicles	Conduct operations with tanks, Stryker, IFV, MRAP, and HMMWV. Operate as a light infantry platoon attached to a heavy unit or control a combat vehicle or tank section or platoon attached to an infantry platoon. Employ combat vehicles to enhance mobility. Support the maneuver of combat vehicles and tanks.
14. Maximize machineguns and automatic weapons in infantry platoon operations	Integrate organic (SAW, M240) and supporting (M2, MK19) AW into operations. Position AW to maximize capabilities and kill power. Provide for AW fire control and specify techniques of fire. Provide AW team security. Provide for AW ammunition support and resupply.

MD Title	Definition
15. Employ shoulder launched and close combat missile systems in infantry platoon operations	Integrate organic and supporting systems into offensive and defensive operations based on METT-TC. Employ LAW and BDM systems against bunkers, buildings, and vehicles. Utilize supporting TOW and Javelin when provided. Position teams for maximum responsiveness. Provide for team security.
16. Conduct infantry platoon observation post and check point operations	Operate semipermanent and mobile OP and overwatch positions. Provide security for and conduct checkpoint operations. Provide for 24 hour operations as required. Supervise and support individual sustained OPs. Provide sniper team support, as required.
17. Conduct infantry platoon sustainment operations	Integrate sustainment requirements into platoon operational planning. Coordinate individual Soldier combat loads and munitions basic load with the company and the transportation plan. Execute routine and emergency resupply activities. Provide for casualty treatment utilizing attached trauma specialist and combat lifesavers. Conduct casualty collection within the platoon and coordinate evacuation with the company.
18. Conduct infantry air mobile, air assault, or airborne operations	Operate as a member of air mobile/air assault team. Conduct heliborne loading, movement, insertion, and extraction operations. Rappel from aircraft. Conduct airborne operations from AF and rotary aircraft using parachutes. Consolidate and organize following airborne or air assault insertions. Transport personnel, equipment, and resupply on helicopters.

Table I.2. Technical MDs for Infantry Company Commander

MD Title	Definition
1. Conduct infantry company troop leading procedures (TLP)	Conduct mission analysis, planning, and preparation activities for infantry tactical operations. Conduct the 8 steps of TLP. Perform precombat checks and inspections.
2. Perform infantry company operations risk management assessment and fratricide avoidance	Assess tactical and operational (accidental) risks of loss of personnel and equipment. Continuously apply and update the 5 steps of risk management. Minimize fratricide conditions through training, controls, battle tracking, and reporting. Conduct continuous operations assessments and stress recognition and control.
3. Conduct light infantry company tactical movement techniques	Perform tactical movement not in contact, utilizing foot marches and motor movements. Select movement techniques based on terrain and situation to facilitate transformation from movement to maneuver. Select routes, establish formations, establish security, and navigate during movement. Conduct movement independently or as part of a larger force. Move to and occupy assembly areas.
4. Conduct heavy infantry company tactical movement techniques	Conduct tactical movement, not in contact, with IFV or Stryker combat vehicles. Select movement techniques based on vehicle characteristics, terrain, and situation to facilitate transformation from movement to maneuver. Select routes, establish formations, establish security, and navigate during movement. Provide for movement logistical support. Conduct movement independently or as part of a larger force. Move to and occupy assembly areas.
5. Plan and develop infantry company offensive operations	Plan offensive operations as part of a larger force. Consider sequence of activities in the offense. Incorporate the critical warfighting function (WFF) into the considerations of the offensive operation.
6. Conduct infantry company movement to contact	Conduct movement to contact as part of an offensive operation. Establish or regain enemy contact. Develop the situation. Conduct MTC mounted or dismounted, separately or as part of a larger force.
7. Perform infantry company actions on contact	Recognize and react to the different forms of contact. Deploy and report, evaluate and develop the situation. Choose and execute a COA.

MD Title	Definition
8. Execute infantry company fire and maneuver	Conduct maneuver, mounted and dismounted. Execute envelopment, turning, infiltration, penetration, and frontal attack maneuvers. Employ organic fires in support of maneuvers. Employ indirect and supporting fires, including CAS.
9. Conduct infantry company attacks	Conduct mounted and dismounted attacks. Conduct hasty and deliberate attacks that are force oriented or terrain oriented. Conduct specialized unit attacks including ambush, raids, counterattacks, and deception operations.
10. Conduct infantry company urban operations (UO)	Plan and execute UO based on population densities and urban structure types and densities. Conduct surface (street), building, and subsurface operations. Support special purpose UO including raids and recovery operations. Conduct urban warfare operations in coordination with IFV and tanks.
11. Plan and develop infantry company defensive operations	Plan mounted and dismounted defensive operations as part of a larger force. Plan for area, mobile, and retrograde defense. Integrate obstacles and displacement and disengagement actions. Coordinate massing of fires.
12. Conduct infantry company defense	Execute mounted and dismounted defense. Conduct sector (area), BP, strongpoint, perimeter, linear, and nonlinear defenses. Prepare and execute engagement areas (EA). Prepare and occupy defensive fighting positions. Execute withdrawal and delay operations.
13. Plan and conduct infantry patrols at company level	Conduct patrols with and without combat vehicle support. Direct and organize combat and reconnaissance patrols. Direct and conduct presence patrols in populated areas. Conduct raids and ambushes.
14. Conduct infantry combined arms operations with tanks and other combat vehicles	Conduct operations as part of a Combined Arms Battalion (CAB). Conduct dismounted operations in conjunction with tanks, IFV, Stryker, MRAP, or other combat vehicles. Coordinate attachment and cross-attachment. Maximize operational characteristics and capabilities and tactical employment of dismounted forces and combat vehicles.
15. Conduct infantry company breaching operations	Conduct operations to reduce, force, or eliminate tactical obstacles as a dismounted or mounted force. Operate as the support, breach, or assault force.

MD Title	Definition
16. Conduct infantry observation post and check point operations at company level	Coordinate semipermanent and mobile OP and checkpoint operations. Provide for 24-hour operations as required. Provide for manning, reporting, and supervision. Provide for element security.
17. Integrate sniper operations at company level	Integrate sniper and unit marksman support into offensive and defensive operations. Request sniper team support and provide for tactical utilization and emplacement/extraction. Provide sniper team security.
18. Conduct infantry company sustainment operations	Plan for and conduct sustainment operations in light and heavy infantry companies. Plan and calculate individual Soldier loads (combat loads, fighting loads, contingency loads) based on METT-TC. Plan tactical resupply. Plan and conduct maintenance, refuel and rearm activities. Provide health service support. Conduct reorganization and cross-leveling.
19. Establish and occupy infantry company lodgment area or forward operation base (FOB)	Establish/occupy area independently or as part of a larger force. Utilize and improve existing structures. Provide layout and security. Establish and request support requirements. Develop and carry out area improvement plans.
20. Conduct infantry company route security and convoy escort operations	Plan and conduct route security operations. Coordinate with transportation and engineer units. Provide for sweeps and overwatch. Coordinate escort movement, displacement, and communication. Provide for close-in convoy protection and reaction forces.
21. Conduct infantry company tactical deployment/ redeployment activities	Conduct individual and collective training to meet deployment mission. Plan timeline. Conduct personnel readiness checks and verify pre/post deployment status. Conduct individual/unit equipment checks.
22. Conduct infantry air mobile, air assault, or airborne operations	Operate as a member of air mobile/air assault team. Conduct heliborne loading, movement, insertion, and extraction operations. Rappel from aircraft. Conduct airborne operations from AF and rotary aircraft using parachutes. Conduct Pathfinder operations. Consolidate and organize following airborne or air assault insertions. Conduct air assault and airborne equipment loading operations.
23. Conduct infantry weapons company operations	Provide TOW, M2 .50 caliber, and MK19 weapons support. Coordinate anti-tank and hard target defeat support. Coordinate support requirements with battalion/company operations and planning. Provide weapons platoon support to infantry companies.

Appendix J

Draft Signal Branch-Specific Technical Major Duties for Division/Corps Platoon Leaders (Tactical and Strategic) and Battalion S6 (Captain)

Signal Branch-Specific Technical Major Duties for Division/Corps Platoon Leader Positions (Tactical and Strategic) and Battalion S6 (Captain)

Table J.1. Technical MDs for Signal Tactical Platoon Leaders

MD Title	Definition
1. Plan signal support	Identify user communication requirements. Perform terrain analysis. Prepare signal orders. Implement higher/lower reporting procedures. Coordinate task organization and command relationships of signal teams. Determine higher/lower reporting procedures. Coordinate security and support requirements of signal teams.
2. Manage signal support	Evaluate changes in user communication requirements. Supervise installation of the network. Monitor network status and its security. Manage communication assets. Manage COMSEC plan. Issue FRAGOs as needed. Implement higher/lower reporting procedures.
3. Plan data support	Determine user software/hardware requirements. Produce network topology diagrams. Determine transmission media specifications and requirements. Plan for data network growth.
4. Manage data support	Direct the installation of the data network. Monitor operation of the data network. Initiate troubleshooting of the data network. Maintain the data network. Manage network changes. Ensure operators are trained in the operation and employment of common user software/hardware. Execute reporting procedures for network security events. Ensure data network/automation hardware/software distribution plan is followed. Supervise data network/automation hardware/software maintenance. Provide data network SA to the commander.
5. Plan COMSEC Support	Develop COMSEC SOP. Develop accounting procedures for COMSEC/controlled cryptographic items (CCI) devices in the network. Identify keying material (KEYMAT) and CCI required. Identify COMSEC sub-hand receipt holders. Develop KEYMAT distribution plan. Develop COMSEC destruction/zeroize plan. Develop Emergency COMSEC destruction plan. Develop KEYMAT change over plan. Identify secure storage location for KEYMAT and CCI. Develop COMSEC compromise procedures. Develop COMSEC training plan.
6. Manage internetwork connectivity	Direct installation of the network. Monitor the operation/quality of the network. Maintain quality of the network. Manage network changes. Execute reporting procedures. Implement network contingency plan. Supervise network maintenance. Provide network SA to the commander.

MD Title	Definition
7. Manage restoration of Communication Services	Initiate outage-reporting procedures. Direct systematic isolation of outage. Identify services affected by outage. Identify/implement redundant capabilities/contingency plan. Provide updates to higher on restoral progress. Identify reason for outage and formulate solution. Coordinate external support for corrective action. Implement validated solution and systematic restoration of services. Document RFO, corrective action, and submit final report.

Table J.2. Technical MDs for Signal Strategic Platoon Leaders

MD Title	Definition
1. Plan signal support	Identify user communication requirements. Prepare signal orders. Implement higher/lower reporting procedures. Coordinate task organization and command relationships of signal teams. Determine higher/lower reporting procedures. Coordinate security and support requirements of signal teams.
2. Manage signal support	Evaluate changes in user communication requirements. Supervise installation of the network. Monitor network status and its security. Manage communication assets. Manage COMSEC plan. Issue FRAGOs as needed. Implement higher/lower reporting procedures.
3. Plan data support	Determine user software/hardware requirements. Produce network topology diagrams. Determine transmission media specifications and requirements. Plan for data network growth.
4. Manage data support	Direct the installation of the data network. Monitor operation of the data network. Initiate troubleshooting of the data network. Maintain the data network. Manage network changes. Ensure operators are trained in the operation and employment of common user software/hardware. Execute reporting procedures for network security events. Ensure data network/automation hardware/software distribution plan is followed. Supervise data network/automation hardware/software maintenance. Provide data network SA to the commander.
5. Plan COMSEC Support	Develop COMSEC SOP. Develop accounting procedures for COMSEC/controlled cryptographic items (CCI) devices in the network. Identify keying material (KEYMAT) and CCI required. Identify COMSEC sub-hand receipt holders. Develop KEYMAT distribution plan. Develop COMSEC destruction/zeroize plan. Develop Emergency COMSEC destruction plan. Develop KEYMAT change over plan. Identify secure storage location for KEYMAT and CCI. Develop COMSEC compromise procedures. Develop COMSEC training plan.
6. Manage internetwork connectivity	Monitor the operation/quality of the network. Maintain quality of the network. Manage network changes. Execute reporting procedures. Implement network contingency plan. Supervise network maintenance. Provide network SA to the commander.
7. Manage restoration of communication services	Initiate outage-reporting procedures. Direct systematic isolation of outage. Identify services affected by outage. Identify/implement redundant capabilities/contingency plan. Provide updates to higher on restoral progress. Identify reason for outage and formulate solution. Coordinate external support for corrective action. Implement validated solution and systematic restoration of services. Document RFO, corrective action, and submit final report.

Table J.3. Technical MDs for Signal Battalion S6 (Captain)[15]

MD Title	Definition
1. Plan signal support	Identify user communication requirements. Perform terrain analysis. Recommend command post (CP) locations. Prepare signal estimates and signal annexes. Through S3, task subordinate units in execution of OPORD. Create network diagrams (data, CNR, multiplexer, SWITCH, LOS, and BLOS). Determine higher/lower reporting procedures. Coordinate task organization and command relationships of signal teams. Coordinate security and support requirements of signal teams.
2. Manage signal support	Evaluate changes in user communication requirements. Supervise installation of network. Monitor network status and security. Troubleshoot the network. Manage COMSEC plan. Update signal estimates. Issue FRAGOs as needed. Update network diagrams (Data, CNR, LOS, and BLOS). Manage communication assets. Re-evaluate frequency plan. Reallocate signal assets to support mission priorities (implement network contingencies). Implement higher/lower reporting procedures. Coordinate task organization and command relationships of signal teams. Provide communications SA (updates and briefs IAW unit specific SOPs).
3. Plan data and voice support	Determine user software/hardware requirements. Determine hardware/software shortfalls and initiated procurement process. Produce data network diagrams. Develop data contingency plans. Determine transmission media specifications and requirements. Develop automation/data network hardware/software distribution plan. Plan for data network growth. Determine user telephone requirements (tactical, Voice over Internet Protocol), plain old telephone service [POTS], etc.). Determine commercial cell/satellite/host nation phone procurement requirements (COTS, Iridium, INMARSAT, etc.). Determine requirements for multilevel telephone security (commercial, tactical, DSN, DRSN). Develop telephone network hardware/software distribution plan. Determine user telephone specific COMSEC requirements. Develop telephone contingency plan.

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[15] In the Signal branch, the battalion S6 position is filled by a captain and is considered a company command equivalent position.

MD Title	Definition
4. Manage data and voice support	Procure software/hardware. Direct the installation of the data network. Monitor the operation of the data network. Initiate troubleshooting of the data network. Maintain the data network. Manage network changes. Ensure operators are trained in the operation and employment of common user software/hardware. Execute reporting procedures for network security events. Ensure data network/automation hardware/software distribution plan is followed. Supervise data network/automation hardware/software maintenance. Provide data network SA to the commander. Direct installation of the telephone networks. Implement telephone network hardware/software distribution plan. Implement user telephone contingency plan. Activate telephone contingency plan. Maintain telephone book/extract. Implement/troubleshoot transmission media (SATCOM, cell, wire). Implement multiple levels of telephone security support (commercial, tactical, DSN, DRSN). Integrate higher, lower, adjacent telephone networks. Integrate Coalition/Joint telephone support. Procure cell/satellite commercial telephones (COTS, Iridium, INMARSAT).
5. Plan combat net radio support	Develop a plan for RETRANS operations. Perform terrain analysis. Submit CNR requirements.
6. Manage combat net radio support	Direct the IOM of the FM, HM, TACSAT, NTDR, and EPLRS networks. Supervise the NCS operations including OTAR. Distribute COMSEC/SOI. Execute contingency COMPLAN. Supervise/monitor RETRANS operations. Implement signal security countermeasures (action on JSIR).
7. Plan COMSEC Support	Develop COMSEC SOP. Develop accounting procedures for COMSEC/CCI devices in the network. Identify KEYMAT and CCI required. Identify COMSEC sub-hand receipts. Develop KEYMAT distribution plan. Develop COMSEC destruction/zeroize plan. Develop emergency COMSEC destruction plan. Develop KEYMAT change over plan. Identify a secure storage location for KEYMAT and CCI. Develop COMSEC compromise procedures. Develop COMSEC training plan.
8. Manage COMSEC	Update COMSEC SOP. Account for COMSEC/CCI devices in the network. Maintain network security through COMSEC updates. Manage KEYMAT distribution. Execute COMSEC destruction/zeroize plan. Execute emergency COMSEC destruction plan. Execute COMSEC change over plan. Secure/store COMSEC materials. Execute COMSEC compromise procedures. Enforce COMSEC policies and procedures.

MD Title	Definition
9. Manage information assurance (IA)	Ensure all information system users have security training required at their level (user, manager, and administrator) and they are provided guidance on IA requirements. Protect against intentional and unintentional destruction or alteration of data. Ensure IAVA directives are distributed and implemented at the user level. Monitor network status and security and reporting measures to counter intrusions and viruses. Implement network security and reporting measures to counter intrusions and viruses.
10. Plan internetwork connectivity	Determine support requirements. Perform terrain analysis. Determine available resources.
11. Manage internetwork connectivity	Direct the installation of the network. Monitor the operation/quality of the network. Manage the network changes. Execute reporting procedures. Implement network contingency plan. Provide network SA to the commander.
12. Manage restoration of communication services	Initiate outage-reporting procedures. Direct systematic isolation of outage. Identify services affected by outage. Identify/implement redundant capabilities/contingency plan. Provide periodic updates to higher on restoral progress. Identify the RFO and formulate solution. Coordinate external support for corrective action as needed (DS, GS, contractor). Implement validated solution and systematic restoration of services. Document RFO, corrective action, and submit final report.
13. Coordinate information management	Maintain relevant information (RI) SA. Recommend means of information dissemination. Coordinate/facilitate timely RI dissemination management with unit staff elements. Provide architecture necessary to collect, process, store, and disseminate RI to support staff C2 functions. Manage CP display and AV systems. Influence CP layouts IOT optimize CP functionality and signal support assets.

Appendix K

Starting Point for Quartermaster Branch-Specific Technical Major Duties for Supply and Distribution Platoon Leader Positions

Starting Point for Quartermaster Branch-Specific Technical Major Duties for Supply and Distribution Platoon Leader Positions

Table K.1. Starting Point for Discussion Regarding MDs for Quartermaster Supply Platoon Leader Positions

MD Title	Definition
1. Materials receipt	Analyze deliveries. Supervise unloading according to the storage plan. Verify quantities, condition, description, and marking against shipping document. Verify seals. Report discrepancies to supply office. Document, segregate, and safeguard questionable/damaged supplies.
2. Materials storage	Determine type and quantity of items to be stored. Plan storage layout. Determine requirements for storage of perishable, pilferable, hazardous, or inflammable materials. Arrange for marking and arrangement of supplies and aisles. Provide for stock rotation in storage plan. Supervise maintenance and inspection of stored supplies.
3. Maintain security of tools and materials	Ensure adequate preservation and security measures are in place, and that pilferable tools are strictly controlled and stored in secured areas. Restrict access; ensure safe storage; and provide in-transit controls for classified and sensitive materials. Establish and maintain security of classified maps.
4. Storage quality assurance	Conduct scheduled inspections on storage facilities. Conduct specialized inspections of items subject to environmental deterioration. Check for location change submissions. Conduct location surveys and verifications. Conduct physical and record inventories. Perform causative research.
5. Issue materials	Arrange time frames for customer pickups so that supplies do not pile up; ensure bulk, sensitive, or pilferable items are issued from secure storage areas. Perform night delivery operations; follow blackout procedures as necessary. Monitor materiel release denials to keep their level low; perform troubleshooting checks; review relevant documents.
6. Class I and water supply operations	Set up a Class I distribution or supply point, and monitor Class I storage. Maintain a small excess stock to handle unexpected surges in Soldier strength; supervise end-of-month inventory. Supervise water point operations; ensure adequate supply of chemicals for purification; coordinate with supply operations officer on well construction and water point improvements. Monitor water requirements; review water supply summary reports to project accurate future water requirements.

MD Title	Definition
7. Slingload operations	Supervise rigging of water drums, 500 gal blivits, cargo nets, vehicles for external slingloads. Direct helicopter (CH47, UH60) external air transport (slingload). Request airdrop support or LCLA APS using parachute extraction from fixed wing aircraft.
8. Class II, IV, and VII operations	Set up Class II, IV, and VII distribution or supply points. Review issue control lists and stock locator file system; report discrepancies and damage to supply operations. Monitor Class VII items listed on command-controlled or regulated-items lists.
9. Laundry and bath operations	Reconnoiter and select operating site; co-locate laundry and renovation sections; arrange for water shipments; coordinate laundry and bath schedules.
10. Mortuary affairs	Supervise the collection, evacuation, identification, and processing of effects and property for deceased Soldiers.

Table K.2. Starting Point for Discussion Regarding MDs for Quartermaster Distribution Platoon Leader Positions

MD Title	Definition
1. Supervise the handling of hazardous materiel	Identify types of hazardous material. Verify that MSDSs are available for each hazardous material stored or transported. Ensure that personnel used the proper clothing/equipment during handling. Establish that transportation guidelines and unit SOP are followed.
2. Analyze performance metrics	Identify DA performance standard that compares actual performance with established DA standards. Identify supply system performance that reflects the performance of the supply system. Identify contributing factors for high zero balance with dues-out. Identify contributing factors for high materiel denials rate. Identify contributing factors for poor demand satisfaction.
3. Perform stockage level management	Determine the RO and ROP. Select the appropriate Stockage List Code (SLC) for each candidate ASL NIIN. Update the ASL by RIC
4. Conduct quality assurance inspection	Employ the objectives of military packing. Manage FEDLOG packaging data. Supervise the use of materials and equipment used in Army packaging. Verify containers requirements. Supervise ESD packing operations. Supervise marking requirements. Inspect the types of storage facilities available for items of supply. Perform care of supplies in storage (COSIS).
5. Coordinate communications processes	Determine communications requirements. Determine the sources and availability of communications assets. Coordinate communications requirements with CSSAMO. Establish STAMIS connectivity.
6. Conduct supply support mission analysis	Interpret paragraph four (4) of the brigade OPORD. Conduct logistics intelligence analysis.
7. Coordinate logistical requirements	Receive logistical requirements from supported units. Coordinate resupply of commodities. Arrange movement of commodities. Track movement of commodities.
8. Operate/use/select distribution enablers (e.g., CROP, PLS, LHS, CHU)	

9. Develop and protect (e.g., ensuring safety of supply convoy) lines of transport based on METT-TC

10. Implement replenishment operations (RO)

11. Coordinate company level distribution points

12. Implement choices regarding best transportation systems for operating environment (e.g., land vehicles, air transit)

13. Follow SOP or Army doctrine when loading, distributing, and unloading the various classes of supply

Note. We believe that several of these MDs are written at a level too high for a Distribution platoon leader, but also believe that Army SMEs could help rewrite them to more appropriately capture platoon leader duties.

Appendix L

**Starting Point for Transportation Branch-Specific Technical Major Duties
for Platoon Leaders**

**Starting Point for Transportation Branch-Specific Technical Major Duties
for Platoon Leaders**

**Table L. 1. Starting Point for Discussion Regarding MDs for Transportation Platoon
Leader Positions**

MD Title	Definition
1. Direct and lead convoy operations	Plan, coordinate, direct and lead convoy operations. Supervise selection and preparation of convoy personnel and vehicles for operations. Conduct reconnaissance of convoy MSRs and/or ASRs. Provide current intel to convoy personnel. Integrate TCN (Third Country National) or civilian contract vehicles into convoy. Conduct convoy briefing pre/post-operations. Supervise the recovery of convoy vehicles. Supervise completion of forms and personnel vehicle operation identification, and submit convoy clearance requests. Plan and coordinate training for new vehicle operators.
2. Direct and lead defense of convoy	Plan and supervise battle drills for convoy defense. Conduct pre-combat inspection. Coordinate defense of convoy with attachments. Direct and lead defense of convoy when attacked. Supervise the reorganization of convoy post-attack.
3. Supervise the maintenance and servicing of transport vehicles	Supervise unit maintenance and servicing of vehicles. Supervise the inspection of vehicles before, during, and after operations. Plan and coordinate the training of drivers in transport vehicle maintenance.
4. Supervise the transport of personnel and cargo	Supervise the loading/unloading of personnel and cargo for transport. Ensure safety of personnel during loading/unloading operations. Inspect loading/unloading of transport vehicles. Maintain accountability of cargo movement between nodes. Initiate investigation and prepare report on driver accidents.
5. Conduct movement control operations	Plan for and conduct routing and scheduling and provide for control of transportation common user assets. Provide for special hauling and HAZMAT transport. Utilize the Automated Unit Equipment Listing (AUEL) and input unit movement data (UMD) into movement.
6. Conduct marine transportation operations	Conduct tugboat support operations in support of port and harbor operations. Conduct unload operations in ship to shore transfer. Conduct inland waterway operations to extend from deep draft ports to inland discharge points.

Appendix M

Sample Focus Group Protocol

Sample Focus Group Protocol

Introduction

Introduce yourself and who you work for.

The objectives of this project are to:

1. Identify officer performance requirements. A *performance requirement* refers to the major job functions (i.e., Major Duties [MDs]) an officer should be able to carry out at a high level of competence.
2. Identify the knowledge, skills, and other personal attributes (KSAs) that enable officers to effectively perform their major job duties.

This research will be used to support the Army in selecting personnel into officer commissioning courses and for assigning junior officers into branches. The overall goal is to support the Army in building and **retaining** a highly proficient officer career force.

Provide each officer with a Privacy Act Statement, the Informed Consent Form, and a Military OneSource Card. Ask them to sign the form and answer any questions they might have.

Summarize or read the following as appropriate:

"We will not attribute comments to any particular participant made during this session, and we will NOT include your name or other personally identifiable information in our interview notes or report. All reports of findings will describe groups of individuals and, in no case, a particular individual. Likewise, we ask that each of you respect the confidential nature of this session, by not identifying individual participants with comments made or heard during this session. We cannot provide "confidentiality" or "non-attribution," to a participant regarding comments involving criminal activity/behavior, or statements that pose a threat to yourself or others. Please do NOT discuss or comment on classified or operationally sensitive information during this session.

For further information about this project or your rights as a participant, send e-mail to: ARI_RES@conus.army.mil (type "PARU Officer Job Analysis FY10" in the subject line).

If responding to any of the questions becomes unpleasant for you, you can withdraw from the discussion at any time. Please note the number on the card we handed out. If you feel you'd like to confer with someone confidentially after this session, please go to the Military OneSource web site. (https://www.militaryonesource.com) or call the 1-800-342-9647 number."

Collect Demographic Forms

Hand out the demographic forms and ask them to complete the forms.

Collect MD ratings:

First, we are going to collect ratings on Major Duties. Again, Major Duties reflect performance requirements of the job—i.e., what an officer does. We have developed a list of Major Duties, based on previous research and Army SME input, which is intended to cover Army-Wide/Shared technical duties and Army-Wide nontechnical duties for all platoon leaders and all company commanders regardless of branch or specific unit assignment. In other words, these are the MDs that are relevant across all or most jobs at the platoon leader and company commander levels. Another part of this project is to develop branch-specific MDs. If time permits, we will spend some time later in the session talking about MDs that are specific to your job/unit.

Hand out the Making MD Ratings document and go over the steps and rating tips. After answering any questions, distribute the MD rating worksheets.

After they are finished making the ratings for the Technical MDs, ask them the following questions:
- For the Technical MD is the Frequency Rating scale appropriate? Do the scale anchors need to be modified, particularly at the extremes?

- Are there any important differences in how these MDs apply for Platoon Leaders versus Company Commanders?

- Is there anything else that is missing from our MD list (either technical or nontechnical)?

Collect KSAO Ratings :

- Next, we are going to collect Importance Ratings for the abilities, skills, and other personal attributes that enable officers to effectively perform their Major Duties.

Hand out the KSAOs Ratings document and go over the steps and rating tips. After answering any questions, distribute the KSAO rating worksheet.

- Closing

Thank them for their time and participation. Be sure to collect all materials and ensure that ID codes are on the rating sheets.

Appendix N

Interview Protocol Used at AWC and ICAF

<div align="center">**Interview Protocol Used at AWC and ICAF**</div>

<div align="center">**Introduction**</div>

Introduce yourself and who you work for.

Project Overview

The U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) is conducting a research program to conduct a study of officer job requirements. The objectives of this project are to:

1. Identify performance requirements for Army officers. A *performance requirement* refers to the major job functions (i.e., Major Duties [MDs]) an officer should be able to carry out at a high level of competence.

2. Identify the skills, abilities and "other" personal attributes (SAOs) that enable officers to effectively perform their major job functions (i.e., MDs).

The information we collect will be used to develop, refine and validate measures that predict officer important outcomes such as success as a junior officer, willingness to continue past the initial ADSO, and likelihood of later success as a field grade officer. These measures are anticipated to support the selection of personnel into officer commissioning courses and the assignment of junior officers into branches. The overall goal is to support the Army in building and retaining a highly proficient officer career force.

Provide each officer with a Privacy Act Statement, the Informed Consent Form, and a Military OneSource Card. Summarize or read the following as appropriate:

"We will not attribute comments to any particular participant made during this session, and we will NOT include your name or other personally identifiable information in our interview notes or report. All reports of findings will describe groups of individuals and, in no case, a particular individual. Likewise, we ask that each of you respect the confidential nature of this session, by not identifying individual participants with comments made or heard during this session. We cannot provide "confidentiality" or "non-attribution," to a participant regarding comments involving criminal activity/behavior, or statements that pose a threat to yourself or others. Please do NOT discuss or comment on classified or operationally sensitive information during this session.

For further information about this project or your rights as a participant, send e-mail to: ARI_RES@conus.army.mil (type "PARU Officer Job Analysis FY10" in the subject line). If responding to any of the questions becomes unpleasant for you, you can withdraw from the discussion at any time. Please note the number on the card we handed out. If you feel you'd like to confer with someone confidentially after this session, please go to the Military OneSource web site. (https://www.militaryonesource.com) or call the 1-800-342-9647 number."

Collect Demographic Forms

Hand out the demographic forms and ask them to complete the forms.

Engage the officer in a Discussion of the MDs and SAOs:

We'd like to get your input on the Major Duty lists and the SAO list we've developed. Again, Major Duties reflect performance requirements of the job—i.e., what an officer does. We have developed a list of Major Duties, based on previous research and input from other Army officers, which is intended to cover both the leadership and the technical major duties at different levels of leadership. In this interview, we'd like to focus primarily on duty requirements for field grade officers, specifically battalion XO, S3, and battalion commander, and how duties change across these levels. The SAOs are the skills, abilities and other personal attributes one needs to perform their major duties.

Let us start by reviewing the list of technical and nontechnical MDs.

1. Thinking about your own job, are there any technical or leadership MDs that are not represented on this list, or are not fully/accurately represented? *[NOTE to Facilitator: Adjust this question as needed, depending on the officer's current position and whether or not he/she has experience as an XO, S3, or battalion commander].*

2. How much of your job is covered by the leadership MDs; how much of your job is more technical in nature?

3. Given your unique perspective about the chain of command under you, as you look through this list, how do the MDs change from platoon leader, to company commander, to battalion staff officer such as XO or S3, to battalion commander?
    a. Are the differences in the actual MDs performed, or do the importance and/or frequency of the MDs vary across levels?
    b. If MDs differ across level, how would you describe the differences? (*note - use example of direct vs. indirect influence in new ntechMDs 03 and 04 if SME needs help understanding the question*).

We would now like you to consider the list of SAOs.

4. Thinking about your own job, are there any SAOs that are not represented on this list, or are not fully/accurately represented? *[NOTE to Facilitator: Again, adjust this question as needed depending on the officer's current position and prior experience.]*

5. Given your unique perspective about the chain of command under you, as you look through this list, how do the SAOs change from platoon leader, to company commander, to battalion staff officer such as XO or S3, to battalion commander?
    a. Are the differences in the SAOs, or do the importance of the SAOs vary across levels?
    b. If SAOs differ across level, how would you rewrite the SAO(s) to capture these differences?

For the last set of questions, we would like you to consider both the MDs and SAOs you have already reviewed.

6. Of the leadership MDs and SAOs, which ones are most critical for you in selecting, evaluating, and mentoring subordinate officers under your command? What kind of balance do you look for between the leadership and the technical duties for your subordinate officers?

If you are, or have been, a battalion commander, how do you use your respective staff majors, in particular your XO and S3? What attributes do you look for in filling these two staff positions (specific to the MD and SAO list)?

Appendix O

Descriptive Statistics on Draft List of SAOs Ranked by Importance

Descriptive Statistics on Draft List of SAOs Ranked by Importance

SAO	Importance (1 – 5)	
	M	*SD*
Integrity	4.74	0.51
Conscientiousness	4.66	0.59
Motivating others	4.66	0.54
Leadership	4.66	0.59
Judgment and decision making	4.63	0.55
Initiative	4.57	0.61
Emotional stability	4.43	0.78
Adaptability	4.37	0.77
General physical ability	4.29	0.79
Oral communication	4.29	0.71
Achievement motivation	4.29	0.71
Planning and organizing	4.26	0.70
Team building	4.23	0.88
Interpersonal skills	4.11	0.87
Learning orientation	4.06	0.64
Develops others	4.03	0.86
Attentiveness	3.97	0.79
Innovation	3.89	0.80
Verbal abilities	3.89	0.87
Shared leadership	3.86	0.91
Written communication	3.86	0.81
Self-esteem	3.80	0.90
Military bearing	3.80	0.96
Team orientation	3.77	1.11
Idea generation and reasoning abilities	3.77	0.77
Memory	3.71	0.89
Self-Directed learning skill	3.69	0.99
Spatial abilities	3.60	0.91
*Empathy	3.59	0.74
Social perceptiveness	3.54	0.92
Perceptual abilities	3.51	0.89
Psychomotor abilities	3.32	0.88
Cultural awareness	3.29	1.02
Quantitative abilities	2.89	0.87

Note. n = 35. Importance rated on a 5-pt Likert scale where 1 = Not Important; 3 = Important; 5 = Extremely Important.

*One SME rated "empathy" as "not applicable." This not applicable rating was coded as "missing" prior to computing the mean and standard deviation on this SAO.

Appendix P

Descriptive Statistics on Draft List of Leadership MDs Ranked by Importance

Descriptive Statistics on Draft Leadership MDs Ranked by Importance

MD Title	Importance (1 – 5)	
	M	*SD*
Lead with confidence in adverse situations	4.75	0.50
Model the Army Values and Warrior Ethos through consistent actions, attitudes, and communications	4.67	0.59
Energize and motivate others toward mission accomplishment	4.64	0.64
Establish mission goals and objectives	4.58	0.65
Empower subordinates to exercise initiative and take ownership over work	4.44	0.69
Trains and develops others	4.43	0.74
Establish and enforce high professional standards	4.42	0.73
Demonstrate a concern for people and their well-being	4.39	0.73
Create an environment that fosters effective teamwork and cooperation	4.36	0.80
Balance the requirements of mission with the welfare of followers	4.28	0.81
Counsel, coach, and mentor others	4.22	0.93
Maintain mental health and well-being	4.22	0.93
Execute plans to accomplish the mission	4.14	0.80
Listen actively to others	4.11	0.82
Identify and adjust to external influences on the mission or organization	4.11	0.92
Build trust in others outside the line of authority	4.06	0.98
Demonstrate self-awareness and self-understanding	4.03	0.77
Identify and leverage opportunities to improve individual, group, and organizational performance	3.97	0.91
Build and maintain working relationships	3.94	1.01
Effectively deal with reasonable setbacks and failures	3.94	0.83
Assess current developmental needs of others	3.92	0.87
Facilitate the ongoing development of others	3.92	0.97
Monitor and evaluate operational effectiveness	3.92	0.87
Prioritize, organize, and coordinate taskings for individuals, teams or other organizational units	3.89	0.98
Critically analyze, evaluate, and organize information	3.89	0.96
Encourage open communications and diverse points of view	3.86	0.99
Expand knowledge of technical, technological, and tactical areas	3.86	0.91
Model conceptual, analytic, and evaluative skills to others	3.83	0.94
Engage in self-development activities	3.83	0.95
Use information appropriately and effectively	3.81	0.98
Foster job development, job challenge, and job enrichment	3.81	0.95
Remove work barriers	3.69	1.01
Account for individual and group capabilities and commitment to task	3.69	0.95
Incorporate an understanding of the sphere of influence into the decision making process	3.69	0.99
Expand conceptual and interpersonal capabilities	3.63	0.84
Create a fair and inclusive work environment	3.58	1.05
Create and disseminate a vision of the future	3.53	1.13
Demonstrate cultural sensitivity in communication	3.47	1.03
Develop and maintain cultural awareness	3.38	1.02
Resolve conflict through consensus-building and negotiation	3.36	0.99
Develop and maintain relevant geopolitical awareness	2.97	1.06

Note. n = 35. Importance rated on a 5-pt Likert scale where 1 = Not Important; 3 = Important; 5 = Extremely Important. None of the leadership MDs were rated as "not applicable" by any of the SMEs.

Appendix Q

Descriptive Statistics on Draft List of Technical MDs Ranked by Importance

Descriptive Statistics on Draft List of Technical MDs Ranked by Importance

MD Title	Importance (1 – 5)		%	Frequency (1 – 7)		%
	M	SD	NA	M	SD	NA
Perform combat lifesaving (CL) and evacuation	4.59	0.74	0.0	2.29	0.91	0.0
Maintain situational awareness (SA) and respond to threats	4.52	0.76	2.9	3.94	1.66	2.9
Perform tactical voice and visual communications	4.47	0.75	0.0	4.42	1.80	0.0
Determine location and conduct cross-country movement (mounted/dismounted)	4.45	0.75	2.9	3.24	1.90	2.9
Supervise operator maintenance	4.44	0.70	0.0	4.24	1.28	0.0
Conduct tactical logistics operations in support of mounted forces	4.42	0.79	2.9	3.81	1.64	5.9
React to contact	4.38	0.79	5.9	3.07	1.39	11.8
Engage enemy with individual weapons and machine guns	4.35	0.95	0.0	2.85	1.44	0.0
Establish and maintain accountability for property, equipment, and purchases	4.32	0.91	0.0	4.15	1.31	0.0
Defeat improvised explosive devices (IED)	4.24	0.95	14.7	2.93	1.38	20.6
Plot information on maps and overlays	4.12	0.84	0.0	3.85	1.60	0.0
Conduct mounted offensive operations	4.12	1.20	0.0	2.91	1.33	2.9
Prepare, deliver briefings and presentations	4.06	1.04	0.0	3.71	1.06	0.0
Conduct reconnaissance, surveillance, and target acquisition (RSTA) operations	3.97	0.98	8.8	3.52	1.45	20.6
Engage enemy with mobile assault weapons	3.96	1.10	26.5	3.00	1.34	38.2
Operate combat vehicles	3.96	1.10	26.5	3.14	1.64	35.3
Conduct mounted defensive operations	3.83	1.12	11.8	2.63	1.52	20.6
Transport and load/unload cargo and personnel	3.82	0.86	17.6	3.35	1.72	23.5
Perform administrative, record keeping and correspondence requirements	3.79	1.05	2.9	5.00	1.30	2.9
Conduct field sanitation, preventive medicine, and accident prevention operations	3.75	1.22	5.9	2.91	1.82	5.9
Conduct security and control operations	3.68	1.07	26.5	2.50	1.64	29.4
Engage and negotiate with host nationals and local leaders.	3.64	1.11	24.2	2.05	1.35	42.4
Interact with indigenous individuals and groups	3.61	1.20	17.6	2.67	1.52	29.4
Conduct mounted tactical movement operations	3.54	1.21	23.5	2.52	1.42	26.5
Conduct urban operations	3.52	1.18	14.7	2.09	1.20	32.4
Establish unit/individual proficiency in close quarter combat	3.48	1.18	2.9	2.12	1.14	2.9
Employ, manage, and control unmanned aerial vehicles (UAV) and UAV support	3.31	1.12	23.5	2.62	1.32	38.2
Prepare and occupy individual and unit fighting positions	3.03	1.30	8.8	1.81	1.33	23.5
Conduct mounted obstacle breaching	2.79	1.08	42.4	1.86	0.95	57.6
Plan and direct the employment of mines and hand grenades	2.44	1.16	26.5	1.68	0.95	44.1
React to nuclear, biological, chemical (NBC) hazards	2.38	1.10	0.0	1.24	0.50	2.9

Note. n = 34. Importance rated on a 5-pt Likert scale where 1 = Not Important; 3 = Important; 5 = Extremely Important. Frequency rated on a 7-pt Likert scale where 1 = once in 1 to 2 years; 2 = 2 to 4 times a year; 3 = once or twice a month; 4 = once or twice a week; 5 = once or twice a day; 6 = once an hour; 7 = several times an hour.

All "not applicable" ratings were coded as missing in the computation of means and standard deviations.