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Force Protection in a Decisive Action Training Environment

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14. ABSTRACT *(Maximum 200 words)*:

Working with members of the Joint Readiness Training Center Warrior Leadership Council, we investigated whether a Leader's Guide for Force Protection could improve units' performance during their Combat Training Center (CTC) rotations. The guide was a brief reference that detailed multiple tasks necessary to successfully conduct force protection. The performance of units that received the Leader's Guide for Force Protection (the experimental group) was compared to the performance of units that did not receive the leader's guide (the control group). Overall, the results indicated the units that received the guide performed no better on the measured tasks compared to units that did not receive the guide. Further analysis revealed that independent of whether or not units received the guide, units that established a force protection working group were more likely to carry out the necessary force protection tasks and they performed those tasks better than units that did not establish a force protection working group.

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FORCE PROTECTION IN A DECISIVE ACTION TRAINING ENVIRONMENT

EXECUTIVE SUMMARY

Research Requirement:

The research described in this report was conducted by the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) in collaboration with the Joint Readiness Training Center (JRTC) Warrior Leadership Council (WLC). The primary goal of this research was to evaluate a brief leader's guide developed to improve Force Protection during JRTC rotations. The guide was designed to improve units' force protection performance in accordance with Army Techniques Publication (ATP) 3-37.10, *Base Camps*; ATP 3-39.32, *Physical Security*; Army Doctrine Publication (ADP) 3-37, *Protection;* Army Doctrine Reference Publication (ADRP) 1-02, *Terms and Military Symbols*; and Field Manual (FM) 3-21.10, *Infantry Rifle Company*. Unit performance was assessed via a Force Protection Checklist developed by ARI and the WLC as a means for Observer/Coach/Trainers (OCT) to collect data on how well units conducted Force Protection in the Decisive Action Training Environment (DATE).

Procedure:

The OCTs filled out checklists to assess units in four areas: Planning, Preparation, Execution, and Overall Performance. The checklists were collected at the end of each rotation. Data were collected from 492 checklists over eight unit training rotations, with four rotations in the control group and four rotations in the experimental group. Based on the performance of four initial/baseline rotations, a Leader's Guide for Force Protection was developed and distributed to the remaining four rotations (the experimental group). The effectiveness of the guide was evaluated by examining differences between the performance of the units in the control group and the units in the experimental group.

Findings:

There were few significant differences found between the performance of units in the control group and units in the experimental group, indicating that the Leader's Guide for Force Protection had little effect on unit performance, as rated by OCTs. However, additional analyses indicated that units that established a force protection working group during the rotation were more likely to conduct every task measured by the OCTs than were units that did not establish a force protection working group. Moreover, units that established a force protection working group, on average, were rated by OCTs as performing those tasks better than did units that did not establish a force protection working group.

Utilization and Dissemination of Findings:

Periodic and summary findings were provided to the WLC to inform them of how units were collectively performing on force protection. The Leader's Guide for Force Protection appears to have minimal to no effect on improving unit performance on the measured tasks.

Nevertheless, the findings from these year-long research efforts can be utilized by the WLC to better develop training for future rotations and to enhance the delivery and impact of that training.

FORCE PROTECTION IN A DECISIVE ACTION TRAINING ENVIRONMENT

CONTENTS

FORCE PROTECTION IN A DECISIVE ACTION TRAINING ENVIRONMENT

The Joint Readiness Training Center (JRTC) is a Combat Training Center (CTC) that supports individual and unit-level training in preparation for combat deployment. The JRTC Warrior Leadership Council (WLC) [1] examines the nuances of operational unit performance and proposes methods to improve individual and unit operations (Dasse, Vowels, Fair, & Boyer, 2017; Scroggins, Vowels, Herger, & Perry, 2018; Vowels, Dasse, Ginty, & Emmons, 2014; Vowels, Scroggins, Daniels, & Volino, 2017).

The purpose of the current research was to evaluate a leader's guide designed to improve force protection. The guide was intended to increase unit force protection performance in accordance with Army Techniques Publication (ATP) 3-37.10, *Base Camps*; ATP 3-39.32, *Physical Security*; Army Doctrine Publication (ADP) 3-37, *Protection;* Army Doctrine Reference Publication (ADRP) 1-02, *Terms and Military Symbols*; and Field Manual (FM) 3-21.10, *Infantry Rifle Company*. The Force Protection Checklist was created by the WLC as a means for JRTC Observer/Coach/Trainers (OCT) to collect data on how well units were conducting force protection during their CTC rotation. The effectiveness of the guide was determined by analyzing the differences in performance between units in the control group and units in the experimental group.

Force Protection

Force protection includes preventative measures taken to prevent or attenuate hostile actions against Department of Defense personnel, resources, facilities, and critical information systems (Joint Publication 3-0). Moreover, the primary purpose of force protection is to preserve the force so that the commander can apply maximum combat power to accomplish the mission (ADRP 3-37). This requires commanders and staffs to organize, integrate, and synchronize resources and capabilities through the operations process. Force protection involves safeguarding not only combatant and noncombatant personnel, but also physical assets, information, and systems of the United States and its allies (ADRP 3-37). Successful force protection depends heavily on proper planning, preparation, and execution. Force protection planning involves, among other things, conducting various assessments (e.g., threat, hazard, criticality, vulnerability, and capability), developing a critical asset list and a defended asset list, establishing a force protection working group, and developing a scheme of protection. Force protection preparation includes, among other things, initiating information collection, conducting liaison with unified action partners, initiating security operations, and managing and preparing the terrain. Force protection execution involves, among other things, conducting offensive tasks, defensive tasks, and stability operations. Properly conducting force protection is essential to minimizing the loss of personnel and maximizing the amount of combat power a unit is able to bring to bear against an adversary. The importance of force protection will only increase as the United States Army begins training for multi-domain operations against a near-peer adversary. Such an adversary would have the technological and operational capabilities to present multiple

[1]Led by the Deputy Commander and Command Sergeant Major of the Operations Group, the council consists of representatives from each Operations Group division, as well as the 1st Battalion (Airborne) 509th Infantry, and the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI). The primary purpose of the council is to leverage the expertise of JRTC Observer/Coach/Trainers (OCT) in order to identify and prioritize the most serious small unit leadership and training deficiencies found across rotations (ARI, 2005).

threats to Department of Defense personnel, resources, facilities, and critical information systems (TRADOC Pamphlet 525-3-1).

In an effort to better prepare units for future operations and improve CTC training, JRTC's WLC decided to measure the performance of units as they conducted force protection during JRTC training rotations. As such, a primary goal of measuring unit performance was to identify areas of weakness in order to develop a tool (specifically, a leader's guide) to mitigate those weaknesses and ultimately improve overall performance for future rotations, particularly in Decisive Action Training Environments (DATE). In cooperation with the JRTC WLC, we examined force protection as rotational units conducted training in a DATE at JRTC.

Data were collected on the effectiveness of force protection conducted by units for eight rotations. Units were observed during all phases of planning, preparation, and execution. Performance for all rotations was assessed using the Force Protection Checklist (Appendix A). A pocket-sized leader's guide (Appendix B) was distributed to units prior to the final four rotations (experimental group). The purpose of the guide was to assist company and platoon leaders in the planning and execution of force protection.

Materials and Methods

Sample

The OCTs collected data on eight rotational Brigade Combat Teams (BCTs). Over the course of the eight rotations, OCTs completed 492 Force Protection Checklists at the echelon in which they were embedded. Of the 492 Force Protection Checklists, 265 checklists were from Active Component units, 95 checklists were from National Guard units, seven checklists were from Reserve Component units, and the component observed was not indicated on 125 checklists. Preliminary analyses revealed no significant differences between components. As a result, all components were included in the analyses detailed in this report. The sample of 492 Force Protection Checklists included 267 checklists from units in the control group (i.e., the initial four rotations) and 225 checklists from units in the experimental group (i.e., the final four rotations). The most common units in the control group were Active Component (57%), completing DATE rotations (73%), were companies (32%) or platoons (29%), were Infantry (41%) or Cavalry (11%), and were observed during multiple rotational phases [e.g., offensive operations and defensive operations] (48%). The most common units in the experimental group were Active Component (49%), completing DATE rotations (71%), were companies (30%) or platoons (19%), were Infantry (32%) or Cavalry (12%), and were observed during multiple rotational phases [e.g., offensive operations and defensive operations] (55%).

Force Protection Checklist

The Force Protection Checklist was developed by ARI and the WLC for this research effort in order to examine force protection across and within rotational units. Major areas of interest included force protection planning, preparation, and execution. Overall performance was also assessed. The first section of the Force Protection Checklist was comprised of general information about the unit, the mission, and rotation observed. The second section of the

checklist was comprised of questions about the unit's planning (e.g., "During planning, did the unit establish a force protection working group?"). The third section of the checklist was comprised of questions concerning the unit's preparation (e.g., Did preparation for force protection include consideration for economy of time and resources?). The fourth section of the checklist was comprised of questions relating to how well the unit executed the necessary tasks (e.g., "Did the unit monitor the employment of security forces for gaps in protection or unintended patterns?"). The fifth section of the checklist required OCTs to assign units an overall grade for their force protection planning, preparation, and execution throughout the rotation. The checklist is available in its entirety in Appendix A. The JRTC Operations Group division leaders issued checklists to OCTs prior to each rotation. The WLC division leaders were responsible for ensuring that the OCTs completed the checklists correctly and for collecting the checklists at the completion of each rotation.

The Force Protection Checklist was made up of both dichotomous (Yes/No) and continuous (scaled) questions. For dichotomous questions, OCTs reported whether or not a unit performed the force protection task in question. For the continuous/scaled questions, OCTs reported "how well" the unit performed force protection tasks on a scale from 0 (*Unsatisfactory/not at all)* to 4 (*Exceeds standard/performed all tasks and prepared for contingencies).* The continuous (scaled) questions are especially informative as they allow for both the use of more sophisticated statistical tests when analyzing the data and can provide a more nuanced understanding of unit performance (Hays, 1994; Vowels, Dasse, Ginty, & Emmons, 2014).

Leader's Guide for Force Protection

The Leader's Guide for Force Protection (Appendix B) was developed by members of the WLC as a training aid to enhance force protection performance. Specifically, the content of the leader's guide was based on observations from the first four rotations (control group). The pocket-sized guide was designed to be a quick reference to improve planning, execution, and follow-up operations. At 5.5 inches by 4.25 inches, the guide could fit in the pocket of leaders for easy access and reference during exercises. This guide was issued to company/platoon/squad leaders in the final four rotations during their initial JRTC rotation briefings (briefings occurred a few days prior to the start of the rotation). However, due to the constraints of the JRTC rotation, we were unable to confirm that every unit leader was issued a guide, or how often the unit leaders referenced the guide if they received one. This guide served as the only independent variable.

The topics covered in the guide were based on the performance of initial rotations, observations of OCTs, input from Army Research Institute researchers, and feedback from WLC members. Each topic contained several subtopics to assist units in conducting force protection during their rotation. For example, the *Planning* section urged leaders to establish a force protection working group, develop a scheme of protection, publish personnel recovery guidance and ensure they are nested with High Command (HICOM), establish protection priorities, and to synchronize protection within the elements of combat power. The *Prepare* section reminded units to identify indicators for threat level changes, emplace systems to detect threats to the critical assets, prepare and improve survivability positions, and to conduct force protection

rehearsals. The *Execute* section directed leaders to focus protection to support the commander's intent and concept of the operation, monitor and evaluate personnel recovery operations, monitor the employment of security forces for gaps in protection or unintended patterns, and to coordinate and control movement to protect critical locations.

Procedure

The JRTC Operations Group divisions issued Force Protection Checklists to the OCTs prior to each rotation. The checklists were collected from the OCTs following the completion of each rotation. The Leader's Guide for Force Protection was given to each unit in the experimental group prior to their rotation. The OCTs were aware of the purpose of the research, including which rotations were in the control group and which rotations were in the experimental group as well as the purpose of the Leader's Guide for Force Protection.

Results

Prior to analyzing the data, multiple steps were taken to correct for errors in the Force Protection Checklist and to maximize the usefulness of the data. First, responses to Question 4 in Section 2 (*Planning*) were not used in the analysis as this question was a duplication of Question 3 in Section 2 (*Planning*). Further, the key provided on the checklist for the continuous/scaled items listed the criterion for responses from "0" (Unsatisfactory/Not at all) to "4" (Exceeds Standard/Performed all tasks and prepared for contingencies); however, the scale listed next to the continuous/scaled items ranged from "0" to "5." To correct for this, the 5s were recoded as 4s. This was not especially problematic as there were only a few cases in which 5s were selected by the OCTs. Additionally, for the continuous/scaled items, the "Not Applicable" responses (coded as a "6" in the dataset) were recoded so as to not inaccurately increase the means and possibly affect the significance of our statistical tests. Lastly, regarding all chi-square tests listed below, cases were only included in the analysis if either a "Yes" or "No" was indicated for both dichotomous items whose relationship was being analyzed. If either (or both) of the dichotomous item responses were missing, or "NA" was indicated, the associated case was excluded from that analysis. Analyses are discussed in the following sections.

The analyses described in this report followed the same structure. Chi-square tests were used to analyze the dichotomous items (Yes or No responses). Independent sample t-tests were used to analyze scale items (0-4 responses). Throughout the results and discussion, scale items are referred to as "continuous" items because the items ask "how well" the unit performed on a task instead of simply whether the unit performed the task (Yes/No). The magnitude of the differences (i.e., effect size) is also reported; we report *Phi coefficients* for the dichotomous data (Kotrlik & Williams, 2003) and *Cohen's d* for the continuous data (Cohen, 1988).

In order to control for possible Type I errors, we used a conservative alpha level of $p < 0.01$ as the threshold for statistical significance for all analyses. Though this stringent threshold for significance increased the likelihood of failing to find an effect when an effect exists, we thought it was necessary given the factors of our design and methodology that we could not control (e.g., how the guide was introduced to leaders, whether or not the leaders used the

guides, etc.). Adjusting the alpha reduced the likelihood of mistaking a false effect for a true effect.

Control Versus Experimental Group Comparisons

Chi-square tests revealed five significant results out of 41 dichotomous items. Compared to the Soldiers and leaders in the control group, Soldiers and leaders in the experimental group were significantly more likely to: prepare and improve survivability χ^2 (1) = 7.76, p = 0.007, ϕ = 0.13; conduct liaison and coordinate with adjacent and protected units χ^2 (1) = 9.18, p = 0.003, ϕ = 0.15; review and recommend adjustments to the commander's critical information requirements and essential elements of friendly information derived from protection tasks χ^2 (1) = 10.44, p = 0.001, ϕ = 0.16; monitor the employment of security forces for gaps in protection or unintended patterns χ^2 (1) = 12.74, p = 0.001, ϕ = 0.17; and to monitor adjacent unit coordination procedures for terrain management vulnerabilities χ^2 (1) = 7.16, p = 0.008, ϕ = 0.13. No other significant differences between the control group and the experimental group were found for any of the other dichotomous items on the checklist (all $p > 0.01$).

Independent samples t-tests revealed one significant result out of the five continuous (scaled) items. Paradoxically, the finding was counter to our expectation, such that units in the experimental group were rated as performing worse during the execution phase (μ = 1.67, SE = 0.08) than were units in the control group (μ = 1.96, SE = 0.06), t(461) = 2.92, p = 0.004, d = 0.27. No other significant differences between the control group and the experimental group were found for any of the other continuous items on the checklist (all $p > 0.01$).

Control Versus Experimental Group Discussion

The Leader's Guide for Force Protection was a brief reference guide that covered the primary mission phases necessary for the successful completion of force protection (e.g., planning, preparation, and execution). Units that received a guide were more likely to prepare and improve survivability positions, conduct liaison and coordinate with adjacent and protected units, review and recommend adjustments to the commander's critical information requirements and essential elements of friendly information derived from protection tasks, monitor the employment of security forces for gaps in protection or unintended patterns, and to monitor adjacent unit coordination procedures for terrain management vulnerabilities. Importantly, despite being statistically significant, these improvements were minor. Additionally, the lone statistically significant result for the continuous (scaled) items revealed that units in the experimental group were rated as performing worse during the execution phase than were units in the control group. Despite the statistically significant result, this finding is likely spurious. As providing units with an information resource (i.e., a leader's guide) is unlikely to causally impair their performance. Moreover, it's important to note that the group means for both the experimental group and the control group were between 1 (sub-standard) and 2 (minimum standard). As such, in real terms, performance was poor across the board. Lastly, most of the key tasks included on the Force Protection Checklist were not statistically different for the experimental group compared to the control group. Overall, the Leader's Guide for Force Protection was largely ineffective.

Additional Analyses

Force Protection Working Group Versus No Force Protection Working Group

As the purpose of the research was to evaluate units' force protection, we examined, independent of whether or not units received a leader's guide, whether those that established a force protection working group during the rotation performed better than units that did not establish a force protection working group. The results of the statistical tests for all sections of the checklist are shown in Tables 1, 2, 3 (non-parametric), and 4 (parametric) below. Analysis of the dichotomous measures of force protection revealed that units that established a force protection working group were significantly more likely to complete every measured force protection task. The sole checklist item that was not associated with establishing a force protection working group was descriptive, rather than performance-based, in nature. Specifically, "were there any discrepancies between higher echelons and unit policies for force protection?." Units that established a force protection working group also performed better on every continuous checklist item; including better overall planning, preparation, and execution. Additionally, units that established a force protection working group had a higher item mean than units that did not establish a force protection working group on all five continuous (scaled) items. Moreover, all five of these differences in means were statistically significant.

Table 1

Non-parametric Tests: Force Protection Working Group Versus No Force Protection Working Group, Section II (Planning)

Checklist Item	Sample Size	*Pearson's* χ^2	*p*	*Phi Coefficient*
II 2 METT-T	360	30.63	†*	0.292
II 3 Dev_CAL & DAL	348	82.87	†*	0.488
II 5 Integrate	360	35.79	†*	0.315
II 6 SoP	355	96.61	†*	0.522
II 7 Priorities	356	76.88	†*	0.465
II 8 Refine	336	43.72	†*	0.361
II 9 Synch	356	29.87	†*	0.290
II 10 Communication	352	22.23	†*	0.251
II 11 PRG_Published	327	36.50	†*	0.334
II 12 FPCON	331	46.13	†*	0.373
II 13 Posture	331	53.35	†*	0.401
II 14 Discrepancies	316	1.67	0.216	0.073
II 15 Assigned	345	64.72	†*	0.433
II 16 Health	333	24.81	†*	0.273

Note. For *Phi* coefficients, associations range from 0.00 to 0.01 for *negligible associations*, 0.20 to 0.40 for *moderate associations* and 0.80 to 1.00 for *very strong associations* (Kotrlik & Williams, 2003).
† Indicates a *p* value of less than 0.001. * Indicates a statistically significant difference at the alpha level of 0.01.

Table 2

Non-parametric Tests: Force Protection Working Group Versus No Force Protection Working Group, Section III (Preparation)

Checklist Item	Sample Size	*Pearson's* χ^2	*p*	*Phi Coefficient*
III 1 Time_Resources	338	33.16	†*	0.313
III 2 Changes	348	45.02	†*	0.360
III 3 Detect	350	38.45	†*	0.331
III 4 Security	348	33.09	†*	0.308
III 5 Positions	358	13.17	†*	0.192
III 6 Coordinate	342	8.09	0.006*	0.154
III 7 Rehearse	352	31.30	†*	0.298
III 9 Refine	331	32.87	†*	0.315
III 10 Train	342	33.09	†*	0.311
III 11 Review_PRR	337	40.97	†*	0.349
III 12 Establish_PR	346	21.51	†*	0.249
III 13 Vuln_Reduction	334	52.50	†*	0.396

Note. For *Phi* coefficients, associations range from 0.00 to 0.01 for *negligible associations*, 0.20 to 0.40 for *moderate associations* and 0.80 to 1.00 for *very strong associations* (Kotrlik & Williams, 2003).

† Indicates a *p* value of less than 0.001. * Indicates a statistically significant difference at the alpha level of 0.01.

Table 3

Non-parametric Tests: Force Protection Working Group Versus No Force Protection Working Group, Section IV (Execution)

Checklist Item	Sample Size	*Pearson's* χ^2	*p*	*Phi Coefficient*
IV 1 Support CI & CO	319	39.83	†*	0.353
IV 2 Review	329	37.92	†*	0.339
IV 3 Changes_GCM&B	329	12.73	†*	0.197
IV 4 Monitor_PRO	343	22.96	†*	0.259
IV 5 Monitor_Gaps	340	22.21	†*	0.256
IV 6 Eval_Liaison	317	47.73	†*	0.388
IV 7 Movement	339	39.49	†*	0.341
IV 8 Monitor_Terrain	338	36.36	†*	0.328
IV 9 Monitor_Readiness	311	55.58	†*	0.423
IV 10 Electronic_Vuln	304	6.97	0.010*	0.151
IV 11 Vuln_Identified	262	15.05	†*	0.240
IV 14 FPP_Usable	302	29.77	†*	0.314
IV 15 Trained	327	15.71	†*	0.219

Note. For *Phi* coefficients, associations range from 0.00 to 0.01 for *negligible associations*, 0.20 to 0.40 for *moderate associations* and 0.80 to 1.00 for *very strong associations* (Kotrlik & Williams, 2003).

† Indicates a *p* value of less than 0.001. * Indicates a statistically significant difference at the alpha level of 0.01.

Table 4

Parametric Tests: Force Protection Working Group Versus No Force Protection Working Group, All Sections

Checklist Item	Group	*N*	*Mean*	*SD*	*t*	*p*	*Cohen's d*
III 8 Effective_Rehearsal	WG	54	2.70	0.96	2.64	0.009*	0.48
	No WG	71	2.21	1.08			
IV 13 Understand_Mission	WG	85	3.11	1.06	3.34	0.001*	0.44
	No WG	213	2.63	1.12			
Overall Ratings							
Planning	WG	98	2.44	1.04	8.44	†*	1.01
	No WG	252	1.40	1.03			
Preparation	WG	98	2.32	1.05	7.37	†*	0.87
	No WG	252	1.44	0.98			
Execution	WG	98	2.27	1.08	5.25	†*	0.62
	No WG	252	1.61	1.03			

Note. For *Cohen's d* 0.20 = small effect, 0.50 = medium effect, and 0.80 = large effect (Cohen, 1988).
† Indicates a *p* value of less than 0.001. * Indicates a statistically significant difference at the alpha level of 0.01.

Force Protection Working Group Versus No Force Protection Working Group Discussion

However promising the influence of establishing a force protection working group appears, it is unlikely that the working group itself was directly responsible for the significant positive outcomes observed in units that established them. This is suggested by the fact that some of the items "improved" by establishing a force protection working group are not directly related to force protection. For example, units that established a force protection working group were rated as having a significantly better understanding of their mission than were units that did not establish a force protection working group. This finding suggests that there may be some underlying unit/leader characteristic or trait that both made the unit more likely to establish a force protection working group and perform every other measured task. Given its significant effects, uncovering these driving characteristics or traits should be the goal of future research.

General Discussion

The goal of the current project was to evaluate the Leader's Guide for Force Protection, a guide developed to improve units' force protection. Based on the performance of four baseline rotations (control group), the WLC developed the Force Protection Leader's Guide. The guide was distributed to the remaining four rotations (experimental group) in order to determine if it could improve performance on key tasks. In the primary analysis, the experimental group was compared to the control group on the tasks scored by OCTs using the checklist. The results of

these analyses revealed that, aside from five force protection tasks, the guide was largely ineffective. Subsequent analyses found that, independent of whether or not a unit received a copy of the guide, units that established a force protection working group were more likely to conduct key tasks, and perform them better, than units that did not establish a force protection working group. Further, units that established a force protection working group had higher item means than units that did not establish a force protection working group on all five of the continuous items from the Force Protection Checklist. All five of those differences in means reached statistical significance. As previously mentioned, it is unlikely that the establishing a force protection working group was directly responsible for the significant positive outcomes observed in units that established them. However, identifying the underlying characteristics or traits responsible for increasing the likelihood that a unit will establish a force protection working group as well as perform every other measured task should be the basis of future research.

The improvements seen in units that established a force protection working group aside, a principal finding from the current project is that units are underperforming during their JRTC training rotations. For example, in this study the overwhelming majority of the units did not establish a force protection working group (264 units did not establish a force protection working group versus 101 units that did establish a force protection working group). This finding is consistent with previous research involving various phases of operations, suggesting that most units perform at a minimal level during JRTC rotations (Dasse, Vowels, Daniels, & Volino, 2017; Vowels, Scroggins, Daniels, & Volino, 2017). The fact that these findings persist across various units conducting different operations (sustainment, offensive, defensive, force protection) suggests that the source of the deficit is pervasive. At the very least, the recurring finding of minimum performance should warrant a closer look at home station training preparation, CTC training, and performance measurement.

The Army units' underperformance during CTC rotations described in this research, and other research, is especially alarming given the fact that current training objectives do not fully simulate the demands of the future operating environment. Future warfare against a near-peer adversary would likely not allow for the use of time-phased and domain-federated operational approaches. Moreover, units would likely be presented with multiple simultaneous threats, across various domains. Further, air and naval supremacy could not be assumed, thus, nullifying the traditional AirLand Battle concept (TRADOC Pamphlet 525-3-1). In light of these facts it is imperative that the United States Army continue to research, develop, and implement scientifically-based methods to improve both unit training and performance. Further, in order to maximize the benefits of these scientifically-based methods, they should be better integrated into home station training across the Army.

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Appendix A

Force Protection Checklist

FORCE PROTECTION CHECKLIST

Disclosure: Data collected with this form will be used for routine research purposes only. Information will not be used in whole or part in making any determination about an individual or unit. Information gathered will be used for statistical control purposes only and will not be disclosed to any unit undergoing rotations at the Joint Readiness Training Center.

SECTION I: GENERAL INFORMATION

DATES OB
SERVED: FROM _____ TO _____ ROTATION NUMBER: _____
ROTATION TYPE: MRE DATE HYBRID CPX COMPONENT: AC RC NG
SIZE UNIT OBSERVED: _____TYPE UNIT OBSERVED: IN AR SF MARSOC CAV
FA EN OD ADA AVN SC MI MP MS RSTA CHEM QM TC CA PSYOP
COMPOSITION: LIGHT/WHEELED/STRYKER/BRADLEY/ABRAMS/OTHER_____
ROTATION PHASE: FE DEF OF LF

SECTION II PLANNING

1. During planning, did the unit establish a force protection working group?	YES	NO	NA
2. Did the unit conduct initial assessments (METT-T)?	YES	NO	NA
3. Did the unit develop a critical asset list and a defended asset list?	YES	NO	NA
4. Did the unit develop a critical asset list and a defended asset list?	YES	NO	NA
5. Did the unit integrate protection tasks?	YES	NO	NA
6. Was a scheme of protection developed?	YES	NO	NA
7. Were protection priorities established?	YES	NO	NA
8. Did the unit refine the running estimate?	YES	NO	NA
9. Did the unit Synchronize protection within the elements of combat power?	YES	NO	NA
10. Were communication channels established among key personnel within protection and leadership?	YES	NO	NA
11. Was personnel recovery guidance published and nested with HICOM?	YES	NO	NA
12. Did the unit set the appropriate FPCON levels?	YES	NO	NA
13. Did the unit understand what the correct posture and secure operating Instructions should be with the set FPCON level?	YES	NO	NA
14. Were there any discrepancies between higher echelons and unit policies for force protection?	YES	NO	NA
15. Were personnel appropriately assigned to specific force protection tasks?	YES	NO	NA
16. Was force health protection planned for?	YES	NO	NA

SCALE: 0= Unsatisfactory/Not at all 1 = Sub-standard/Performed some tasks 2 = Minimum Standard/Performed most tasks 3 = Standard/Performed all tasks 4 =Exceeds Standard/Performed all tasks and prepared for contingencies N/A = Not applicable

SECTION III PREPARE

1. Did preparation for force protection include consideration for economy of time and resources?	YES	NO	NA
2. Did the unit identify indicators for threat level changes and information vulnerabilities?	YES	NO	NA
3. Were systems emplaced to detect threats to the critical assets?	YES	NO	NA
4. Did the unit emplace and direct operations security measures?	YES	NO	NA
5. Were survivability positions prepared and improved?	YES	NO	NA

6. Did the unit conduct liaison and coordinate with adjacent and protected units	YES	NO	NA
7. Did the unit rehearse force protection?	YES	NO	NA
8. If so, how effective was their rehearsal?	0 1 2 3 4 5		NA
9. If required did the unit revise and refine the plan?	YES	NO	NA
10. Did the unit train with defended assets?	YES	NO	NA
11. Did the unit review the personnel recovery readiness of subordinate units?	YES	NO	NA
12. Did the unit establish personnel recovery?	YES	NO	NA
13. Were vulnerability reduction measures implemented?	YES	NO	NA

SECTION IV EXECUTE

1. Did the protection focus support the commander's intent and concept of the operation?	YES	NO	NA
2. Did the unit review and recommend adjustment to the commander's critical information Requirements and essential elements of friendly information derived from protection tasks?	YES	NO	NA
3. Were changes to graphic control measures and boundaries due to the increased risk of fratricide?	YES	NO	NA
4. Did the unit monitor and evaluate personnel recovery operations?	YES	NO	NA
5. Did the unit monitor the employment of security forces for gaps in protection or unintended patterns?	YES	NO	NA
6. Did the unit evaluate the effectiveness of liaison personnel for protection activities?	YES	NO	NA
7. Was movement coordination and control to protect critical paths monitored?	YES	NO	NA
8. Were adjacent unit coordination procedures for terrain management vulnerabilities monitored?	YES	NO	NA
9. Were the readiness rates of response forces involved in fixed-site protection monitored?	YES	NO	NA
10. Were there any electronic security vulnerabilities?	YES	NO	NA
11. Were the vulnerabilities identified?	YES	NO	NA
12. If so, how were they mitigated? _____			
13. How well did the unit understand their mission?	0 1 2 3 4 5		NA
14. Was the force protection plan usable?	YES	NO	NA
15. Was the unit appropriately equipped and trained to effectively protect their force from all threats present on the Battle Field?	YES	NO	NA
EXPLAIN: _____			

SECTION V OVERALL

Rate how well the unit executed the following Force Protection phases.

Planning	0 1 2 3 4
Prepare	0 1 2 3 4
Execute	0 1 2 3 4

How many Field Training Exercises in which Force Protection was integrated into training did the unit conduct in the last 3 months? ____6 months? ____

OCT Initials_____ OCT Call sign_____ Division/Task Force _____
Number of rotations OCT has observed _____

LEADER'S GUIDE FOR FORCE PROTECTION

REFERENCES

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PLANNING

1. Establish a force protection working group.

2. Conduct initial assessments (METT-T).

3. Develop a critical asset list and a defended asset list.

4. Integrate protection tasks.

5. Develop a scheme of protection.

6. Establish protection priorities.

7. Refine your running estimate.

8. Synchronize protection within the elements of combat power.

9. Establish communication channels among key personnel within protection and leadership.

10. Publish personnel recovery guidance and ensure they are nested with HICOM.

11. Ensure your unit understands what the correct posture and secure operating instructions are and enforce the FPCON level.

12. Identify and fix any discrepancies between higher echelons and unit security plans for force protection.

13. Appropriately assign personnel to specific force protection task.

14. Plan for force health protection.

PREPARE

1. Include consideration for economy of time and resources.

2. Identify indicators for threat level changes.

3. Identify indictors for information vulnerabilities.

4. Emplace systems to detect threats to the critical assets.

5. Emplace and direct operations security measures.

6. Prepare and improve survivability positions.

7. Conduct liaison and coordinate with adjacent and protected units.

8. Conduct force protection rehearsals.

9. If required revise and refine your plan.

10. Train with defended assets.

11. Review the personnel recovery readiness of subordinate units and establish personnel recovery.

12. Implement vulnerability reduction measures.

EXECUTE

1. Focus protection to support the commander's intent and concept of the operation.

2. Review and recommend adjustment to the commander's critical information requirements and essential elements of friendly information derived from protection tasks.

3. Make changes to graphic control measures and boundaries due to the increased risk of fratricide.

4. Monitor and evaluate personnel recovery operations.

5. Monitor the employment of security forces for gaps in protection or unintended patterns.

6. Evaluate the effectiveness of liaison personnel for protection activities.

7. Coordination and control movement to protect critical locations.

8. Monitor adjacent unit coordination procedures for terrain management vulnerabilities.

9. Monitor the readiness rates of response forces involved in fixed-site protection.

10. Determine if there are any electronic security vulnerabilities.

11. If vulnerabilities are identified develop a plan to mitigate the problem.

LEADER NOTES