NEXT YEAR IS NOW

A thesis presented to the Faculty of the U.S. Army Command and General Staff College in partial fulfillment of the requirements for the degree

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MASTER OF MILITARY ART AND SCIENCE Wargame Design

by

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2018

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ABSTRACT

NEXT YEAR IS NOW, by Major Jose J. Dominguez, 83 pages.

This thesis and wargame addresses the question, "Can a game be developed to enhance company level Unit Training Management within the National Guard?" By using a qualitative discussion format that showcases the need and relevance of such a training model, company level leaders in the National Guard can be better trained and developed to adapt to the possibility of competing federal training and state's no notice mission requirements. This research is augmented by the United States Army's implemented annual training requirements and recently published Sustained Readiness Model that is required to be achieved by the components of the Active, Reserve, and National Guard respectively. Furthermore, conducting research by playing a variety of classic and modern wargames, simulations, and board games, appropriate elements and mechanics were adapted to create a relevant game using the Time, Space, Assets, and Resolution or TSAR Model. Thus, through game development and testing of "Next Year is Now," a game that can improve company level Unit Training Management in the National Guard has been produced.

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and limitless. Unfortunately, the world is full of naysayers, pessimists, and cynics who will try to keep you down. Don't ever listen or pay any regard. Hopefully, I serve as proof that hard work and determination in and of itself goes a long way in proving a lot of people wrong. The world is yours and only you know your limits. I am very proud of you and continue carving your own path.

Yes, I can come home now. Thank you!

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CHAPTER 1

INTRODUCTION

The purpose of "Next Year is Now" is to expedite and enhance the leader development of newly assigned and current National Guard company commanders on how to develop a sound and achievable Unit Training Management program. Due to an inherent Title 32 training framework, National Guard officers must be deliberately developed in order to gain situational understanding of the many facets involved in developing, implementing, executing, and accessing their Unit Training Management program that is nested within their respective brigade's training goals and the Army's readiness guidance.

Additionally, the intent of "Next Year is Now" is to enable National Guard officers to become adaptable and flexible towards emerging or changing requirements, while following the newly implemented Sustained Readiness Model as well as complying with the Congressional established 39 training day constraint.¹ Moreover, "Next Year is Now" can also serve as a running estimate or briefing development tool to illustrate to battalion and higher commands when a unit's training day allocation will culminate or why specific training goals were not accomplished within a specified timeline.

Currently, within the Army National Guard, approximately every January all company and battalion staffs are required to brief their respective Unit Training Plan in detail to their brigade commander. The purpose of briefing the Unit Training Plan is to ensure that company commanders and above leaders have a viable Unit Training Management program. Moreover, the Unit Training Plan ensures company commanders have conducted a thorough crosswalk of their Unit Identifications Code's combined arms

training strategies and standardized Mission Essential Task List (METL) against the current Army Readiness Guidance.² This annual process ultimately contributes to the sustainment or enhancement of a unit's readiness and ensures it will be available for federal missions. However, this process does not incorporate or take into account the state government's immediate response needs or emerging operational requirements in the event of unforeseen events such as a natural or manmade catastrophe. Therefore, regardless if it is a state or national requirement that is being met, the Title-32 soldier can still only operate on the same 39-day timeline. Thus, without an effective wargaming training model, company commanders can quickly exhaust unit strength without achieving the battalion commander's training goals, the Army's readiness guidance, or having enough available forces for immediate response requirements.

Just last year the Army Chief of Staff, General Mark A. Milley implemented the Sustained Readiness Model which modernized and objectively standardized the Army's readiness guidance which complies with the current National Military Strategy. The four updated and enhanced imperatives of Army readiness are manning, training, equipping, and leader development.³ Of the four imperatives or pillars of the Sustained Readiness Model: manning, training, and leader development are three aspects identified as requiring attention by the Army National Guard. This is not to say that the Sustained Readiness Model cannot be achieved by the Army National Guard, just that other mechanisms such as a wargame can be utilized to enhance and optimize the conditions for company level leaders to achieve the standardized requirements of the new readiness model.

¹ U.S. Code, Title 32 § 502 – *Required Drills and Field Exercises*, accessed September 29, 2017, https://www.law.cornell.edu/uscode/text/32/502.

² Headquarters, Department of the Army (HQDA), Field Manual (FM) 7-0, *Train to Win in a Complex World* (Washington, DC: U.S. Government Printing Office, 2016), 1-12.

³ Mark A. Milley, Memorandum to all Army Leaders, Subject: Army Readiness Guidance, Calendar Year 2016-17, accessed January 19, 2018, https://www.army.mil/e2/downloads/rv7/standto/docs/army_readiness_guidance.pdf.

CHAPTER 2

LITERATURE REVIEW

Background

When examining the body of knowledge on wargames or wargaming, a very small and select group of authors, editors, game designers, and historians emerge. For instance, names like Charles Grant, Donald Featherstone, Phil Baker, and Tony Bath. After serving in Europe during the Second World War, all of them started applying their respective military experiences to game design, rulebook development, and the expansion of the tabletop wargame hobby as we know it today. Furthermore, the inspiration to the development of wargaming during the mid-20th century can be attributed to English writer Herbert George Wells' 1913 publication of *Little Wars*. This rulebook on how to play with toy soldiers in essence was an early 20th century wargame as it incorporated conceptual principles on how to maneuver infantry, cavalry, and artillery in order to subdue an enemy.¹

Overtime, H. G. Wells' would expand his wargaming rules to incorporate logistics, engineering, and military transportation.² Nonetheless, the inspiration for H.G. Wells' literary work on *Little Wars* can be attributed to Prussian Army Lieutenant George Leopold von Reistwitz and his son who created *Kriegsspiel* or *The Wargame* in 1812 for King Friedrich Wilhelm III. Reistwitz used his *Kriegsspiel* in order to train his army officers on tactical maneuvers, while experiencing fog of war, and limited communications.³ By the late 19th century, *Kriegsspiel* would undergo several gamemaster modifications and game play updates in order to enhance the players' experience and training value. In time, *Kriegsspiel* would gain popularity and be seen as a vehicle for military exercise and a training tool for the development of Prussian General Staff officers.⁴ Thus, Reistwitz's *Kriegsspiel* set the foundation of wargaming firmly within a professional military context.

Modern War Gamers

Currently, within the discipline of wargames, the foremost subject matter experts and contributors to the field are: Dr. Peter Perla, John Curry, and Philip Sabin. Dr. Peter Perla, the author of *The Art of Wargaming: A Guide for Professionals and Hobbyists* is considered as one of the leading American experts in wargame research, theory, and design. Since the late 1970s, Dr. Perla has served in several federal agencies ranging from the Department of Defense, Center for Disease Control and Prevention, and the United States intelligence community developing the fundamental applications and principal uses of wargames in existing military and agency exercises. Overall, Dr. Perla enhanced wargaming for professionals and hobbyists by ensuring his game design suspended the disbelief of game players meanwhile encouraging the active learning process.⁵

In 2008, John Curry started the History of Wargaming Project and has since gained international acclaim for collecting, cataloging, and republishing the largest collection of original wargaming materials, books, and rules. Moreover, John Curry's professional reputation as an academic wargamer and wargaming author has led him to edit and contribute to a whole host of wargaming publications currently in use around the world in government agencies and armed forces.⁶ Without John Curry's contribution to wargaming a large body of game theory, design, and mechanics would have been lost and innovations in the discipline would not have been made possible.

Philip Sabin, the Author of Simulating War: Studying Conflict Through

Simulation Games has used his 30 plus years of wargame design experience to evaluate the theory and mechanics of relevant and successful serious games. He also provides examples of wargames developed over the past five decades. The overall purpose and intent of his work is to educate the reader on the principles of researching and designing a wargame. Additionally, Mr. Sabin is known to showcase and incorporate the design and rules of several simulations and wargames in his work so that students or professionals understand the fundamentals and are prepared for game development.⁷

These modern wargaming authors enable the developing wargame designer to better understand the broad utility of wargaming and how to properly and effectively design new games. Additionally, these wargaming authors have been able to demonstrate why serious games work in a social, academic, and professional settings. These professional wargamers are the current leaders in academic and professional wargaming theory and practice.

Current Army Training Guidance and Publications

In designing "Next Year is Now" this researcher studied and reflected on the current national training policy for the National Guard, current Army training requirements, current Army training assessment tools, as well as an array of board games. First and foremost, on 10 August 1956, the 84th United States Congress passed U.S. Code: Title 32 which outlined the organization, personnel, training, and service of the National Guard. Moreover, in Section 502 it codifies the total amount of time and the required drill periods in which National Guard soldiers must participate in to be considered active participating members. In short, National Guard Soldiers are only required to attend 39 training days per calendar year.⁸

Moreover, on a recurring annual basis, U.S. Congress passes the National Defense Authorization Act (NDAA) for each fiscal year. Additionally, Congress on occasion will also incorporate required or recommended mandatory training within the NDAA. Such as training in Suicide Prevention and Sexual Harassment/Assault Response and Prevention.⁹ Undisputedly, the prescribed mandatory training is necessary for the health and welfare of the organization as a whole, however, it too requires time. The evolution or changes to national strategic policy also drive the Army Chief of Staff to modify, add to, or illuminate training requirements outlined in a whole host of Army regulations and policy directives. Nonetheless, in Table F-1 of Army Regulation 350-1, Army Training and Leadership Development published in 2017, it outlines mandatory training and other requirement for all soldiers in the Army ranging from briefs, individual training, and professional development.¹⁰

Coincidently, Army Regulation 350-1 does not outline the task, conditions, or standards for Modified Table of Organization and Equipment or Table of Distribution and Allowance Units' required training. For that commanders and unit leaders must access the Army Training Network online database. There, all units within the Army can find their respective Mission Essential Tasks ranging from individual to collective training. Furthermore, for each task, a Training and Evaluation Outline Report can be found which identifies the task number, title, Objective Task Evaluation Criteria Matrix, and performance steps and measures which enables the training to be executed to standard and at the appropriate echelon.¹¹ Thus, the functionality and application of the

unit determines the amount of performance steps that are needed to be trained and properly performed.

Ultimately, all unit training, regardless of type of unit must be evaluated collectively in order to ensure tactical and/or technical proficiency, shared understanding, and unity of effort is established across the entire formation. Therefore, commanders and unit leaders must also know how to navigate the Force Management System Web Site or FMSWeb. FMSWeb is the Army's database that augments the Army Training Network online database by way of providing current reports of the strength or manning requirements of all Modified Table of Organization and Equipment or Table of Distribution and Allowance Units. Therefore, providing the commander with relevant and current information regarding the specific type, specialty training level, and total number of soldiers needed to conduct Army standardized training in accordance with their respective units Training and Evaluation Outline Report and Objective Task Evaluation Criteria Matrix.¹²

Nonetheless, a lot of work goes into developing and shaping Army training from the strategic down to the tactical level. Thus, in developing "Next Year is Now," all the aforementioned codes, regulations, systems of record, and matrixes were researched and incorporated. This extensive examination and subsequent integration ensured an appropriate or realistic training model could be developed to mimic a modern and familiar Army unit. For ease of development, explanation, and understanding, the Rifle Company of the Infantry Brigade Combat Team was used as the subject for this serious game and training model. Reason being, is that all branches of the United States Army and Military Occupational Specialties are acquainted with and support the Infantry. Thus,

this gave way to developing a baseline wargame that all players and interested parties could easily understand at first glance and afterward tailor to other branches or units of the United States Army.

Relevant and Applicable Serious Games

In developing "Next Year is Now" this researcher underwent extensive professional development in serious games. Over the course of six months a whole host of wargames, simulations, and board games were researched, presented, discovered, and played in order to gain a better understanding of game design, mechanisms, and rules. From playing Ted Raicer's World War I strategy wargame "Paths of Glory," James Myers' Cold War force building and sustainment simulation "Logistics Command," Craig Besinque's Capitalism versus Communism geopolitical strategy game "Triumph & Tragedy," Lieutenant Georg Leopold von Reiswitz' 1824 Prussian Army map wargame "Kriegsspiel," Phil Fry's Naval strategy game "1805: Sea of Glory," as well as Richard Sivél's Seven Years' War strategy game "Friedrich" to name a few. By playing these games, a better appreciation of the wargame discipline was achieved as well as how certain aspects of game design, mechanics, rules and training value could be implemented in designing "Next Year is Now."

The four most noteworthy games that possessed key and relevant elements of game play and which contributed to the development of "Next Year is Now" were "1944: Race to the Rhine," "Dominion," "Sails of Glory," and "Terraforming Mars." Jaro Andruszkiewicz's and Waldek Gumienny's World War 2 strategic and competitive war game "1944: Race to the Rhine" enables three players to work collaboratively or independently in order to make it across the Rhine. Through the use of network building, point to point movement, and an action point allowance system, players can negotiate obstacles along the access corridors used by General Patton, Field Marshal Montgomery, and General Bradley as the allied forces advanced from Paris to the Rhine.¹³

Donald Vaccarino's medieval era strategy game "Dominion" allows up to four players to compete against one another in a race to see who can construct the most prosperous kingdom. Through the use of the mechanisms of card drafting, hand management, and deck-building, players must make decisions on every turn as to how they will use their assets to purchase additional resources, attack enemy vulnerabilities, or defend against aggression. Ultimately, building a system and developing a strategy that dominates against other players through the course of the game.¹⁴

Andrea Angiolino's and Andrea Mainini's Naval Warfare strategy game "Sails of Glory" is set during The Age of Sail. This wargame enables as many players to develop decision, space, and timing strategies in order to accurately close with the vessels of fellow competitors so that they can be either rendered dead in the water or destroyed. Through the use of action/movement programing and simultaneous action selection players navigate across the game board simulating naval tactics and combat until all competitors are eliminated.¹⁵

Jacob Fryxelius' futuristic entrepreneurial strategy game "Terraforming Mars," allows up to five players to compete amongst each other to see who can lucratively make the planet Mars habitable. Through the use of card drafting, tile placing, hand management, and variable player powers, players develop strategies through the use of project cards which can increase the production of various resources. Ultimately, the aim of the game is to acquire the most Megacredits and lucrative tile space before Mars is completely terraformed.¹⁶

Not surprisingly, there is a great and unique history to the discipline of wargaming. This rich and broad field provides a whole host of methods and techniques to resolve an array of problems. Moreover, the current rules and regulation that drive Army training requirements creates a time constrained environment that company level commanders must be able to adapt to. Luckily, the range of wargames and simulations developed or reviewed by the leading names in game researchers and designers provides for a great body of knowledge where a wargame developer can go to acquire knowledge as to how to build a new wargame to solve the identified problem set. These findings will be presented in more detail in chapter 4 "Major Design Aspects."

¹ Herbert G. Wells, *Little Wars* (London, England: Arms & Armour Press, 1913).

² John Curry, *Donald F. Featherstone's War Games: Battles and Maneuvers with Model Soldiers* (Bristol, England: History of Wargaming Project, 2014). 16-17.

³ Greg Lastowka, Wargames: 1a. A Brief History of Wargaming, University of Virginia School of Law, 1999, accessed January 20, 2018, http://faculty.virginia.edu/setear/students/wargames/page1a.htm.

⁴ David B. Lee, "War Gaming: Thinking for the Future," *Airpower Journal* (Summer 1990): 40-51.

⁵ Peter P. Perla, *The Art of Wargaming: A Guide for Professionals and Hobbyists* (Annapolis, MD: Naval Institute Press, 1990), 74.

⁶ John Curry, "Documenting the Development of Wargaming," Wargaming.co, 2014, accessed January 19, 2018, http://www.wargaming.co/.

⁷ Philip Sabin, Simulating *War: Studying Conflict Through Simulation Games* (New York: Continuum International Publishing Group, 2012), 56.

⁸ U.S. Code, Title 32 § 502.

⁹ U.S. Congress, *National Defense Authorization Act for Fiscal Year 2013* (Washington, DC: U.S. Government Printing Office, 2013).

¹⁰ Headquarters, Department of the Army (HQDA), Army Regulation (AR) 350-1, *Army Training and Leader Development* (Washington, DC: Government Printing Office, 2017), 175-177.

¹¹ Headquarters, Department of the Army, "Army Training Network, Training Solutions to Stay Army Strong," 2018, accessed January 20, 2018, https://atn.army.mil.

¹² Headquarters, Department of the Army, "Force Management Support Agency," 2018, accessed January 20, 2018, https://fmsweb.fms.army.mil.

¹³ *1944: Race to the Rhine*, by Jaro Andruszkiewicz and Waldek Gumienny (Phalanx, 2014).

¹⁴ Dominion, by Donald X. Vaccarino (Rio Grande Games, 2008).

¹⁵ Sails of Glory, by Andrea Angiolino and Andrea Mainini (Ares Games, 2012).

¹⁶ Terraforming Mars, by Jacob Fryxelius (FryxGames, 2016).

CHAPTER 3

IMPORTANT ASPECTS OF DEVELOPING "NEXT YEAR IS NOW"

When conceptualizing how to develop a relevant Leadership Development and Unit Training Management model for the Army National Guard, the following six overarching aspects presented themselves: 1) optimizing the Army National Guard's inherent training framework, 2) addressing the National Guard's constrained annual training horizon, 3) developing understanding of Army readiness doctrine, 4) fostering adaptability towards changes in training priorities, 5) understanding the positive and negative effects regarding soldier availability, and 6) the ability to track current and future readiness goals. By analyzing these six aspects "Next Year is Now" could be developed to enable company commanders and their command teams gain an enhanced, comprehensive, and relevant understanding how to manage their respective Unit Training Program in accordance with the Sustained Readiness Model.

Optimizing the Army National Guard's Inherent Training Framework

It goes without saying and cannot be discounted that the traditional National Guard Soldier introduces unique and capable skill sets to the Army organization as a whole by virtue of parallel career development. For instance, the education, credentialing, and experience of a first responder, educator, or equipment operator can easily be adopted and dovetailed into military service within any active or reserve component of the uniformed services. However, it also must be noted that the overall development of a soldier in either the Active, Reserve, or National Guard differs due to the component's inherent requirements and regulations. Nonetheless, the leadership capabilities or expertise of the traditional National Guard soldier are not being examined. The inherent training framework associated with the Army National Guard is being researched in order to identify relevant and effective mechanisms that can be modeled and implemented to optimize the technical and doctrinal understanding of Army Readiness at the Company level.

The Army National Guard's inherent training framework refers to two mutually exclusive but legally dependent variables that play a vital role in Army National Guard culture. The first inherent timeline variable refers to the United States Code: Title 32 or the Role of the United States National Guard. On 10 August 1956, the 84th United States Congress passed U.S. Code: Title 32 which outlined the organization, personnel, training, and service of the National Guard. Moreover, in Section 502 it codifies the total amount of required drills or unit training assemblies in which National Guard soldiers, both officers and enlisted, must participate in order to be considered an active participating member. Therefore, establishing and mandating that all National Guard soldiers are required to attend a total of 39 training days per calendar year in order to remain in good standing.¹ The establishment and implementation of U.S. Code: Title 32 independently seems reasonable and benign. However, when overlaid with the second inherent timeline variable a relevant and important Leader Development challenge emerges.

The second inherent timeline variable is the House of Representative Bill 1040 or Reserve Officer Personnel Management Act. On 13 May 1993, the 103rd United States Congress passed a provision to regulate military officer management. Therefore, establishing and implementing the aspect of time-in-grade and time-in-service requirements for promotion to the next higher rank with increased responsibilities. For instance, an Army Second Lieutenants can be promoted to First Lieutenant by law immediately after 18 months of successful time-in-grade and time-in-service respectively. Subsequently, a First Lieutenant is eligible for promotion to the rank of Captain after completing an additional term of 24 months' time-in grade but requiring a cumulative total of four years' time-in-service.² Once again Congress enacted a provision that was reasonable and beneficial to serviceman and the Army National Guard.

However, when examining both established and now inherent timeline variables independently they appear a win-win for all parties involved. However, when templating and calculating the career of both current federal laws, the numbers speak for themselves. Under U.S. Code: Title 32, an Army National Guard soldier or officer on average is required to serve a total of 39 days out of a 365-day calendar year. Juxtaposed, a traditional and average Army National Guard officer from date of commissioning is required to serve a cumulative of four years before becoming eligible to be considered for the rank of Captain. Therefore, a National Guard Officer's total operational experience, to include respective professional military education conducted at an Army training facility or institution averages a total of 156 days or a cumulative of five months when becoming eligible for consideration for promotion to Captain and subsequently company command. This promotion timetable highlights combined with the National Guard's training framework, shows that a National Guard officer, on average, possesses one tenth of the operational experience of his/her active duty counterpart.

Needless to say, Army directed and instituted requirements have evolved and increased over the past 24 years creating tensions and friction points that need to be addressed in order meet today's requirements and tomorrow's challenges. However, this inherent training framework cannot be overlooked or mitigated through parallel career development alone. Thus, relevant and effective mechanisms that can be modeled to optimize and bridge the gap regarding the technical and doctrinal understanding of Army Readiness at the Company level must be developed in order mitigate the challenges inherent in the Army National Guard's training framework.

The National Guard's Annual Training Horizon

As highlighted previously, in 1956, the 84th United States Congress passed U.S. Code: Title 32 which outlined the total number of drills or unit training assemblies that a traditional National Guard soldiers are required to attend in order to remain in good standing as an active participating member in the organization.³ Therefore, precluding that a unit has been identified to deploy in support of a contingency operation, participate in an overseas deployment for training, or take part in an external evaluation such as a Warfighter, National Training Center rotation, or Exportable Combat Training Capability exercise, a traditional National Guard unit is only authorized 39 total days by law to conduct all required training needed to sustain unit readiness. This equates to the proverbial one weekend a month and two weeks in the summer, traditionally scheduled by all reserve components. Nonetheless, Company Commanders are authorized the flexibility to plug and play training requirements throughout the year in order to maximize training effectiveness and efficiency. This means, taking one or a maximum of two training days from one month and combining it with another in order to capitalize on the training assets and venues. Nonetheless, National Guard units are not authorized to exceed the 39-day training day allocation without prior approval, funding, and concurrence of the soldiers in the unit. Thereby, the average traditional National

Guardsman would commonly attend a total of 39 training days per fiscal year which includes the two-week requirement of Annual Training typically held sometime in the summer.

Despite these limitations, a National Guard company commander and their command team must still develop an annual Unit Training Plan in accordance with FM 7-0, *Train to Win in a Complex World*. In developing the Unit Training Plan, the company commander is responsible for and required to develop a training strategy that addresses their respective unit's assigned missions and readiness requirements.⁴ Moreover, the Unit Training Plan must also conform to the federal constraint of 39 training days per year. Furthermore, it becomes an arduous task to balance the planning, preparing, executing, and assessing of a company's Unit Training Plan that is typically executed over an entire year and not across a little over one month's time. Thus, as the National Guard's training horizon is very limited and requires deliberate planning in order to achieve desired or directed readiness goals. Thus, a wargame can assist in shaping realistic and attainable readiness objectives.

Developing Understanding of Army Readiness Doctrine

Undisputedly, it goes without saying that the requirements and standards that are needed to be upheld across all three components of the Army can be challenging at times. At this point, the two aspects currently addressed are experience and time driven. Consequently, to understand, visualize, and describe current Army readiness doctrine and its requirements also demands the facilitation of in-depth training, guidance, and mentorship. Unfortunately, as highlighted by the National Guard's inherent training framework, traditional National Guard officers may be hindered due to the lack of exposure and experience to the Army's day to day operations. Therefore, they may not be aware that they possess gaps in their doctrinal knowledge until an error occurs, they are required to perform a task, or asked to justify a decision. In short, as the classical Greek philosopher Socrates once stated "you don't know what you don't know."⁵ Thus, once again, time is a precious and finite commodity that is required to build experience and shared understanding amongst military officers.

Therefore, if time is not allotted or available to conduct leader development explaining the art, science, and linkages between all the currently published Army training doctrine, company grade officers will not know that a knowledge gap exists nor possess the expertise or wherewithal to mentor and develop their subordinate officers or command team. Thus, the unfamiliarity with current Army training doctrine can be addressed and mitigated by cross-walking and incorporating all current major training points and requirements into a wargame. In doing so, this will prevent wasted time and develop shared understanding and experience.

Fostering Adaptability to Recover from Changes in Training Priorities

The Greek philosopher Heraclitus of Ephesus is credited for coining the phrase "The only thing that is constant is change."⁶ That sentiment rings true across all walks of life. However, with regards to the Army National Guard which operates in a paradoxically accelerated but yet constrained timeline, change can at times be a destructive and counterproductive variable. Furthermore, it is common knowledge that if change occurs in the Army, the calculation utilized to enact change is typically a one for one exchange. This units of measure do not always have to be equal, nonetheless, something has to be given up in order for it to be replaced or changed with something else. This challenge comes to the forefront every year when commanders are required to change their approved Unit Training Plan in order to meet unforeseen or emerging requirements. Undisputedly, Heraclitus of Ephesus was correct, change is constant and unexpected. However, adapting to change requires analysis and judgment, or in other terms, time and experience to implement the appropriate one for one exchange that is beneficial for the organization and supports the Sustained Readiness Model. Undisputedly, the Army expects that all officers be adaptive and agile leaders that exercise disciplined initiative in an ever-changing environment. Consequently, in a time and resource constrained environment as it exists in the National Guard, no-notice emergencies, emerging requirements, or change of plans can hinder a unit's overall readiness because a training requirement was not conducted due to a change in mission. This variable becomes challenging as the year progresses due to the fact that less days are available to conduct the necessary one for one exchange needed to make-up the needed training. Thus, a unit training management wargame could enable company commanders and their command team to exercise their Unit Training Plan as well as develop adaptability skills enabling efficient and effective responses towards unexpected changes, thereby enhancing their ability to recover from any potential set back in unit readiness.

Balancing Soldier Availability with Key Leader Requirements

According to Chapter 27, section 270303, subsection A, of the Department of Defense Financial Management Regulation that was published in November 2017, it states that "A distance of 50 miles, one way, is normally considered to be within reasonable commuting distance of the station, but the 50-mile rule in not inflexible."⁷ This financial management regulation is the typical planning consideration utilized by National Guard Leadership and recruiters to fill duty position vacancies within a unit. For instance, depending on the composition and location of units within their respective area of responsibility, a recruiter will work with regionally affiliated command teams to recruit viable candidates to fill vacant duty positions. This means if a potential candidate is interested in joining the National Guard he or she will be first offered all the positions they are qualified for and that are located within a 50-mile radius of their current home address. However, if the candidate is interested in a particular Military Occupational Specialty that is not within the 50-mile radius, if eligible they can still enlist or commission into that position. Nonetheless, they need to be aware that they may be incurring some financial hardship or risk in taking a duty position outside what is considered a reasonable commuting distance by the Department of Defense as they will not be eligible for travel reimbursement when attending Unit Training Assemblies.

This unique variable associated with the National Guard at times makes it a challenge to fill unit's ranks with a specifically required soldier. For instance, a unit may require a soldier of a certain rank and with a specific Military Occupational Specialty in order to fill a key position in a section that is required to be evaluated on a recurring basis. However, unlike the active Army, unit command teams cannot contact the Army's Human Resources Command for assistance in developing or transferring viable candidates to fill the position. As commanders and command teams at the lowest level play an integral role in recruiting and talent management, they must be exposed to how to address recruitment and talent management in order to sustain or improve unit readiness in accordance with the Sustained Readiness Model.

The Ability to Articulate Current and Future Readiness Goals

The ability to articulate what has occurred or justify why specific training was not completed comes from truly understanding in breadth and depth the environment in which one is operating. Therefore, to achieve sound situational understanding a National Guard company commander must maintain a running estimate that serves as a briefing tool to explain current conditions and describe how required goals can be achieved in the future. For instance, a well-established and maintained running estimate of a Unit's Training Plan can foster shared understanding of a company's readiness at a specific snapshot in time as well as assist in prioritizing short or long-term training and readiness goals that benefits the organization and support the Sustained Readiness Model.

By developing a wargame that enables commanders and their command teams understand their respective company's current readiness state, a viable strategy can be developed to foster relevant and attainable training goals. Moreover, by truly understanding the company's readiness state, Company Commanders can articulate realistic and achievable readiness benchmarks pertaining to personnel availability and training needs. Furthermore, due to changes in training or emerging requirements, such a wargame could also serve as a template for a running estimate to showcase what was forecasted but not achieved due to unforeseen events. Thus, providing a briefing tool to assist in explaining the company's new current readiness state as well as serve as a starting point for the development of the next year's Unit Training Plan. Thus, by developing "Next Year is Now," company commanders and their command teams will have a mechanism that enables them to analyze and describe the current readiness state of their company, demonstrate what readiness requirements were accomplished, and if

required serve as a continuity tool as leadership transitions occur.

¹ U.S. Code, Title 32 § 502

² U.S. House, Congress, H.R. 1040 – *Reserve Officer Personnel Management Act*, 1993, accessed January 22, 2018, https://www.congress.gov/bill/103rd-congress/house-bill/1040.

³ U.S. Code, Title 32 § 502

⁴ HQDA, AR 350-1.

⁵ Julia Annas, *Intelligent Virtue* (Oxford, England: Oxford University Press, 2011).

⁶ Martin N. Giesecke, "The Only Thing That is Constant is Change–Heraclitus, circa 500 BCE," *ASA Newsletter* 79, no. 9 (2015): 4-5.

⁷ Department of Defense, *Financial Management Regulation, Volume 1-16* (Washington, DC: U.S. Government Printing Office, 2017), 27-7.

CHAPTER 4

MAJOR DESIGN ASPECTS OF "NEXT YEAR IS NOW"

The first task in this research was to establish the six relevant aspects required in developing a sound Leadership Development and Unit Training Management model for the Army National Guard. However, bringing together all the individual aspects into a coherent and effective wargame will be a challenge in the subsequent phase. Nonetheless, in order to address and incorporate the six overarching aspects, a representative sample of serious games had to be analyzed, explored, and played in full. This allowed for the identification of the appropriate mechanisms needed to simulate the appropriate and desired training objective. Outlined below, are all the major design aspects that were identified and deemed applicable and relevant towards developing "Next Year is Now."

Optimizing the Army National Guard's Inherent Training Framework

The overall purpose and intent of "Next Year is Now" is to optimize the Army National Guard's inherent training framework. As previously stated, this study is not intended to bring into question the leadership abilities and capabilities of Army National Guard officers or their command teams. The purpose of this study is to develop a serious game that can accelerate and optimize the experience and knowledge gap that may be present or that is being faced by Army National Guard leaders today. Thus, the purpose and intent of this wargame is to serve as a Leadership Development tool and Unit Training Management model that can assist company level leaders in gaining a better understanding as well as participate in a practical exercise that develops a broader and shared understanding of the Sustained Readiness Model. In turn, this wargame will improve not only the capabilities of the individual officers who plays, but those of the organization as a whole, as platoon leaders will inevitably become company executive officers, then company commanders, and ultimately battalion S-3s. Therefore, the training objective of "Next Year is Now" is intended for the company level leader, but the implication is to develop the entire force overtime at all echelons. Thus, nullifying the inherent training framework with regards to unit readiness. This goal will be accomplished by way of describing the major design aspect in the following three areas.

Framing the National Guard's Annual Training Horizon

It is common knowledge that the Gregorian calendar which replaced the Julian calendar and implemented in 1582 by the Pope Gregory XIII is the most widely used calendar to date. Moreover, the Gregorian calendar is comprised of the current 12 months which we recognized as a full year. Therefore, as most American government agencies operate and are assessed regarding what was accomplished within a calendar year, the major design aspect of framing "Next Year is Now" was to use the Time Track method. The Time Track method is a mechanism that establishes a continuum of specific turns in which each player must make a decision. Therefore, each turn develops or creates specific positive or negative outcomes that effect future turns or the overall outcome of the game. The Time Track method can be seen used in the serious game *Terraforming Mars* where players represent giant corporations attempt to set inhabitable conditions on the planet Mars so that it can be eventually colonized and become profitable in the players favor. As it takes time to accumulate assets, such as funding, land, and technology, the Time Track method enables the player to gain awareness as well as strategies on how to better arrange and implement their development plan. In both

observing and playing *Terraforming Mars*, the aspect of the Time Track became apparent as the preferred mechanism to mimic the National Guards annual training horizon.

Leader Development

According to Chapter 2, "Officer Leader Development" in Department of the Army Pamphlet 600-3 (DA PAM 600-3), *Commissioned Officer Professional Development and Career Management*, the purpose of leader development is to grow officers through training, education, and experience obtained through institutional, operational, and self-development¹. However, as previously described institutional, operational, and self-development opportunities within the Army National Guard are not as recurring as that of the active component. Moreover, DA PAM 600-3 also states that leader development must also enhance an officer's ability to apply problem solving and decision-making skills while building agile and adaptive leaders.² Therefore, these leader development aspects had to be incorporated into the design of "Next Year is Now" through game-play decision making.

In the first game-play phase of "Next Year is Now" the player must obtain their respective company's composition and disposition through a series of eight die rolls. The random outcome of each die roll contributes in determining the current state of the company's composition and disposition. Furthermore, these series of random outcomes lend to the players first decision. The player now possessing information on the state of their respective company, what is required of the unit to accomplish by the end of month 12, and how they will be externally evaluated drives the analysis process which contributes to the commander's dialog. The commander's dialog is an important leader development aspect because it enables a commander to explain as well as manage expectations to the next higher command as to what work can be accomplished due to the current state of the company. Thus, once the player gains situational understanding of the games expectations a wager of a maximum of five victory points can be made on what assessment level could be achieved at games end. Therefore, developing communications and decision-making skills through utilizing the randomness mechanism of dice rolling.

In phase two of game-play, the player must make a series of decisions as how to develop a feasible and executable unit training plan. Utilizing the 26 Training Event Cards, the player must decide how to arrange and nest unit training events using the Army's Time Management Cycle meanwhile not exceed the 39 available training days or reducing unit morale. Through card drafting and card placement, decision-making skills are developed while providing an opportunity in gaining experience in developing an actual and executable unit training plan.

In phase three of game-play the player will have to negotiate through three distinct decision-making cycles. During the first decision-making cycle, the player encounters two random event cards during each of the twelve turns. One event card is drawn from a common pool of like in color Time Management Cycle Events. For example, in turn one, if a red cycle training event is being conducted during that specific turn, then one red cycle event card will be drawn from the pool of event cards and then revealed. A subsequent random event card will be drawn from the pool of recurring events cards and then reviled. The positive or negative outcomes of both events encountered during each turn will either increase or degrade the units overall force multilayer points or impact that specific turns or future turns training events. This design aspect addresses the small items or nuances that commanders and command teams must

mind and apply necessary command influence to ensure training will be completed to standard and to the benefit to the organization. Thus, through additional card drafting, the player will experience the company's recurring successes, failures, and unforecasted events in an accelerated manner as well become aware as to how small efforts or oversights can greatly impact an organizations unit training plan.

During the second decision making cycle, the player must use the dice rolling mechanism to identify if the training scheduled during the turn was successfully accomplished. During each turn, depending on how many events the player placed or nested on that specific month during the second phase of the game, the player is allowed to roll a ten-sided die twice to identify the percentage of task completion. Of the two rolls, the player gets to select the higher score. For example, the player rolls a five and an eight, the player gets to mark the training event as 80 percent task completed.

However, if both rolls yielded low scores such as two fives, the player has four options to mitigate the situation. First, the event at no cost to the player can be rescheduled at a later turn which can offset or effect other training events. Second, one of three Commanders Influence Chips can be used to ensure 100 percent task completion for that specific event. Third, as many Force Multiplier Points can be spent to increase the die roll by 10 percent per point used. Lastly, if the task completion rate is marginal and the event deemed important enough, one of two Battalion Coordination Chips can be used to make-up the incomplete training with a sister unit and not affect future turns. This recurring decision-making cycle makes the player assess his current conditions, decide how to expend limited resources if deemed necessary, as well as take into consideration the cascading effects of unit failure. Thus, through random die rolling throughout this decision-making cycle, the player is being developed in becoming adaptive and agile towards unforeseen changes in the units training plan.

The last decision-making cycle occurs on every third turn. At the start of turns three, six, and nine the player has the option to either pull one leader or one soldier chip from their respective repositories. This decision will either have the correct or no effect in filling the company's unit vacancies. Nonetheless, by tracking unit vacancies it enhances the players understanding of the importance of specific individuals and the percentage of soldiers required to attend training. This is one of the most important and overarching aspects of the Sustained Readiness Model that needs to be developed and understood by the entire company command team. Thus, this design aspect had to be incorporated.

Meaning Making

The primary purpose of this study was to develop a serious game that could accelerate and optimize the experience and knowledge gap that may be present or being faced by Army National Guard leaders today. Therefore, the main take-a-way of playing "Next Year is Now" all the way through is having a completed Company Training Running Estimate at games end. Field Manual 6-0, *Commander and Staff Organization and Operations*, defines a running estimate as a continuous assessment of the current situation which can determine if current operations are proceeding according to plan and if future operations are supportable.³ Thus, in order to understand the effects and the implications of the decisions made throughout game-play, a comprehensive running estimate had to be completed to develop meaning making of what transpired and how said decisions or events impacts future planning. Undisputedly, due to the many random variables in game-play, the outcome of each game will be different. However, the
completed product at games-end will provide an analytical tool that showcases how the company's training objectives ebbed and flowed throughout the year as well as what was truly accomplished. Moreover, this exercise and the development and implementation of a Company Training Running Estimate can translate into a physical training management tool that can enhance the overall organization. Thus, providing a tangible and objective starting point for the following year's unit training plan development or an accurate continuity tool that enhances shared understanding in the event of a change of command.

By incorporating the design aspects of as: the time track method, event cards, die rolling, card drafting, card placement, and completing a running estimate, all six important leadership developments objectives can be addressed in playing "Next Year is Now." Moreover, through extensive game-testing and redesign, "Next Year is Now" can be played all the way through to games end in a flued and logical manner. Therefore, "Next Year is Now" does meet the intent of serving as Leadership Development tool and Unit Training Management model. Thus, by playing this serious game, the outcome can assist company level leaders in gaining a better understanding as well as participate in a practical exercise that develops a broader and shared understanding of the Sustained Readiness Model.

¹ Headquarters, Department of the Army (HQDA), Department of the Army Pamphlet (DA PAM) 600-3, *Officer Professional Development and Career Management* (Washington, DC: U.S. Government Printing Office, 2017), 5.

² Ibid.

³ Headquarters Department of the Army (HQDA), Field Manual (FM) 6-0, *Commander and Staff Organization and Operations* (Washington, DC: U.S. Government Printing Office, 2014), 8-1.

CHAPTER 5

CONCLUSION

Can a wargame be created to expedite and enhance the leader development of National Guard company commanders on how to develop a sound and achievable Unit Training Management program within the Army National Guard's inherent timeline framework? The overarching purpose, study, and subsequent design of "Next Year is Now" was the focal point in answering this question as well as the purpose of this thesis. Chapter 1 provided a background on the purpose, intent, and the need to develop "Next Year is Now." Chapter 2 offered a brief history on the evolution of wargames, highlighted the foremost subject matter experts and contributors to the field, as well as what relevant Army training publications and serious games helped shape "Next Year is Now." Chapter 3 showcased the six important wargame aspects that needed to be addressed through the development of "Next Year is Now." Chapter 4 provided a thorough crosswalk of the major design aspects of "Next Year is Now." This final chapter will present the future plans and applications, lessons learned, recommendations from the author based on the knowledge and experience gained from developing and designing "Next Year is Now."

Future Plans and Applications

As mentioned in chapter 3, change is the only constant variable in life. Therefore, just as the Army Force Generation Model was replaced by the Sustained Readiness Model, another training and readiness model will be developed and implemented within the Army in the future. Moreover, with recurring changes to Army modernization priorities, unit manning and training requirements will also continue to change to meet emerging national requirements and global demands. Therefore, the development and present form of "Next Year is Now" can only serve as a current and viable Leadership Development tool and Unit Training Management model as long as the Army's training model and a unit's respective METL remains the unchanged. Otherwise, small changes or updates will be needed to be made to each unit's respective version of "Next Year is Now," in order for that wargame to be effective and have any training value.

Lessons Learned

The most substantial and overarching lesson learned from developing and designing "Next Year is Now" is that a serious game designer cannot successfully navigate through the entire wargame design process alone. From concept to play-testing, it takes a whole host of subject matter experts and personalities to provide feedback, guidance, and recommendations on how to improve or modify the wargame to achieve the desired learning objectives and outcomes. Moreover, a serious game designer must possess an extensive amount of humility to understand he has come to a dead end or has just returned to square one in developing a workable product. Furthermore, it takes passion to develop a serious game. If the theme, problem set, or case study does not arouse curiosity or interest, there will be no motivation to conduct extensive research on the topic or incentive to invest hours of personal time playing wargames in order to identify applicable gameplay mechanisms that help frame the problem and complement the aspects of games design. Thus, the ultimate lesson learned from the wargame design process is that it takes a robust team of passionate individuals to develop an entertaining game on serious, uninteresting, or technical subject matter.

Recommendations

By no stretch of the imagination is "Next Year is Now" entirely complete. With more time, additional gameplay improvements, design aspects and decision cycles could be incorporated to make "Next Year is Now" a more comprehensive wargame. The biggest wargame design aspect that I recommend for future exploration is how to develop gameplay interoperability among players. For example, at this time the player's decisions or effects do not impact other players during turns. This specific aspect requires further exploration because collaboration and support are a fundamental requirement in ensuring organizational success within the Army. Another recommendation for future study is how this training model could be tailored towards or applied to Army talent management, crew stabilization, or any other personnel managerial functions. Perhaps, once the framework has been established other learning objectives could be applied in order to enhance and optimize a soldiers understanding on an array of subject matter. Thus, "Next Year is Now" has only begun the process on how we can more effectively develop our military leaders. However, it is certainly a big step in the right direction because it provides players the opportunity to put training doctrine into practice and a venue to refine their actual training plan.

APPENDIX A

INSTRUCTIONS, SEQUENCE OF PLAY, AND RULES

<u>Players</u>

"Next Year is Now" is a one to four player game and is also dependent on the amount of game parts and accessories on hand.

- 1. For learning purposes or due to limited game parts and accessories on hand, players can team up in pairs.
- 2. The players of "Next Year is Now" are assuming the role of a Company Commander of a Rifle Company within an Infantry Brigade Combat Team.
- 3. The objective of "Next Year is Now" is to develop a Unit Training Plan that is nested with and will achieve the Battalion Commanders training objective of conducting multiple company level Movement to Contacts during an External Evaluation being conducted during Annual Training (Month 12). However, it is up to the players to properly manage their respective units training program as possible unforeseen or unforecasted events arise effecting the training plan.
- 4. To win "Next Year is Now" the players must successfully achieve the training objective of successfully validating as a "T-," achieving the most victory points, or being able to effectively justify the reason why certain training was or was not conducted at the end of the game.

Setting Up "Next Year is Now"

Step 1. Lay out the game board (planning horizon) at the center of the table.Step 2. Place the Command Leadership Card above and to the left of the game board.

Step 3. Place the Objective T Evaluation Criteria above and to the center of the game board.

Step 4. Place the Training Management Cycle Card above and to the right of the game board.

Step 5. Place the Company Training Running Estimate Card below and to the left of the game board.

Step 6. Place the Force Multiplier Points Card below and to the center of the game board.Step 7. Place the Rifle Company (IBCT) Mission Essential Task List Crosswalk sheetbelow and to the right of the game board.

Step 8. Place the decks of playing card, dice, Battalion Coordination and Commanders Influence Chips, and pull cups on any available or open space on the table.



Figure 1. Set-up Illustration

Creating Company Composition and Disposition

The first phase of "Next Year is Now," mimics the inherent challenges of taking command of an Army company. As Company Commander must assess, develop, and manage their respective training plan with the available personnel assigned, creating company composition and disposition assists in developing the initial problem of the game to which future decisions will need to be made.

- 1. First (1) Roll: To identify number of missing (not assigned) company leadership.
 - a. In this turn each player will roll one D6 one time.
 - b. The number rolled equals the number of Company Leadership squares needing to be pulled from the 16-ounce Solo Cup.
 - c. The number of Company Leadership squares pulled will determine the leaders not present (not assigned) within company.
 - d. The Company Commander (player) gets to determine were the leaders not present are arrayed within the company forcestucture.
 - e. The roll also identifies the percentage of the leaders not present.
 - f. Once the leaders not present are marked on both parts of the Percentage of Leaders Present at Training/Authorized Card return the Company Leadership squares to the chip container and proceed to next turn.
- Second (2) to (4) Fourth Roll: To identify percentage of soldiers present in each platoon.
 - a. In this turn each player will roll one D6 three times.
 - b. The number rolled during each three rolls corresponds to percentage available in each platoon.

- c. Once the corresponding percentages of soldiers present in each platoon is marked on the Percentage of Leaders Present at Training/Authorized Card, then add all three percentages and divide by three to identify the overall Soldiers Present percentage.
- d. Mark the overall percentages on the Objective T Evaluation Criteria card and the Company Training Running Estimate Card.
- e. Once all steps a through d are complete proceed to next turn.
- 3. Fifth (5) to Eighth (8) Roll: To identify the Force Multiplier Points of the company.
 - a. In this turn each player will roll one D6 four times.
 - b. The number rolled corresponds to number of points available in each of the four categories from top to bottom.
 - c. Once the corresponding number of points available in each of the four categories is marked on the Force Multiplier Points Card proceed to next Turn.
- 4. Ninth (9) Roll: To identify how many days during annual training higher command will direct consolidated training in month 12.
 - a. In this turn each player will roll one D6 one time.
 - b. The number rolled corresponds to number of days higher command will direct consolidated training at the beginning of annual training.
 - c. This will also determine if the number of training days available before starting the Conduct Movement to Contact External Evaluation exercise starting on the 10th day of annual training.

- d. Mark on the Planning Horizon Card the days that are now directed as consolidated training days.
- e. Once the all information is marked on the Force Planning Horizon Card proceed to next Turn.

Analyzing and Understanding the Company Composition and Disposition

At this point it is necessary for each player to analyze and understand the current make-up of their respective company. This will enable the players to make well informed decisions in following turns.

Commander's Assessment and Wager

- Once the company's composition and disposition is established, the Company Commander (Player) will need to review the Rifle Company (IBCT) Standardized METL Card and Objective T Evaluation Criteria Card in order to conduct a commander's assessment.
- Once the commander's assessment is complete, the Company Commander (Player) can wager on the task assessment level that will achieved by the end of the game.
- 3. Once the wager is made on the Objective T Evaluation Criteria Card proceed to next step. (It is also recommended to take notes on the Commander Training Running Estimate in order to track and maintaining situational understanding of what has transpired throughout the game.)

Training Cards

Training Cards come in three colors. In accordance with FM 7-0 each category of Training Card possesses events that corresponds to that specific training cycle. For example, Red Cycle Training is all mandatory and individual training, Amber Cycle Training is all the individual Army Warrior Tasks and the Squad Battle Drills, and Green Cycle Training are all the Supporting Collective Tasks. Training Cards possess four pieces of information. First, the lettering highlight denotes the training cycle the event belongs to. Secondly, the number and day at the top of the Training Card denotes how long the event takes to complete. Third, the event denotes what training event is being conducted. Lastly, the percentage at the bottom denotes the training target for the company. If the target is not reached the event must be repeated.



Figure 2. Training Card Example

Training Card Use

- Utilizing the Time Management Cycle Card and the Planning Horizon Card the player will develop a Unit Training Plan that that is nested with and will achieve the Battalion Commanders training objective of conducting multiple company level Movement to Contacts during an External Evaluation being conducted during Annual Training (Month 12).
- Using the number of days at the top of each Training Card and the event, the player creates a 12-month Unit Training Plan by way of clustering like events in order to maximize training time and not exceed the allotted 39 training days.
- If the player selects to conduct training for a fourth day (annotated in red on Planning Horizon Card) on any given month to maximize time two morale points will be deducted from Force Multiplier Points.

Event Cards

Event Cards come in varying colors. Similarly, to Training Cards they are color coded accordingly to correspond to events that may take place during that specific training cycle. This adds a level of realism and probability of such events taking place during respective training cycles. Moreover, not all event cards are in color as such events can occur at any time.



Figure 3. Event Card Example

Event Card Use

- The Company Commander (Player) independently shuffles the four decks of event cards meanwhile making sure that they are not mixed.
- 2. Once the four event cards decks are shuffled to the Company Commander (Players) satisfaction, the player pulls 11 Event Cards from the Random Event Card Deck without revealing the cards face. The player can either pull from the top, bottom, or combination thereof from the deck.
- Once the 11 event cards are pulled the player must place one Event Cards without revealing the face on months 1 through 11 on the 12 Month Planning Horizon Card.
- 4. Depending on how the player arrayed the Training Cards across months 1 through 11 on the 12 Month Planning Horizon Card, the majority of either red, amber, or green cycle training events will determine the color of either red, amber, or green event card that will be randomly selected from corresponding deck and placed face down alongside the Random Event Card on months 1 through 11 on the 12 Month Planning Horizon Card.

 Thus, on months 1 through 11 on the 12 Month Planning Horizon Card there should be two event cards that will be played during each turn.

Force Multiplier Points

Force Multiplier Points represent a unit's ability and capacity to complete events. During rolls five (5), six (6), seven (7), and eight (8) a D6 is rolled to determine the initial number of points in each of the four Force Multiplier Point categories. Force Multiplier Points are gained or lost during gameplay in each turn. However, Force Multiplier Points can be used to improve each event roll on every turn. For example, one force multiplier point equals an additional 10 percent per event roll. Thus, enhancing event completion but assuming risk in obtaining additional victory points at games end.



(Shared feeling of pride, fellowship, and loyalty)

Figure 4. Force Multiplier Points Example

Source: Created by author.

Victory Points

- 1. Victory points can be earned in three different ways during game play.
 - a. The Player with the highest Force Multiplier Points in each category at the end of the game earns 1 victory point for a possible of 4 victory points.

- b. The Player can earn 1 victory point by completing all training in one of the Red/Amber/Green cycle training areas or have completed the most training events in each are for a possible of 4 victory points.
- c. The player will be awarded the number of victory points if the player achieves or exceeds the Task Assessment Rating wagered at the beginning of the game. No additional victory points are awarded or deducted if the player exceeds or underachieves their Task Assessment Rating wager.
- d. The total of victory points earned during game play will determine the overall winner of the game.

Percent of Leaders Present Chips

- Percent of Leaders Present Chips represent the 20 key leaders within the company's force structure. Additional Percent of Leaders Present Chips can be obtained at the start of the third (3), sixth (6), and ninth (9) training horizon turns when the player can select to either pull one Percent of Leaders Present or Soldiers Present Chip or randomly through Event Card selection.
 - a. On the First (1) Roll: A D6 is rolled to identify the number of missing (not assigned) company leadership from the unit's force structure.
 - b. The number rolled using a D6 on the third, sixth, and ninth turn equals the number of Company Leadership squares that can be pulled to fill the company leadership.
 - c. The number of Company Leadership squares pulled will determine the possibility of positions to be filled.

- d. However, as the pool of available Commander Leadership Chips returns to
 20 at each turn, the player may or may not pool the desired leadership
 positions.
- e. The Company Commander (player) gets to determine were the new members are arrayed within the company forcestucture.
- f. Once the missing (not assigned) members are removed from the Percentage of Leaders Present at Training/Authorized Card return the Company Leadership squares to the 16-ounce Solo Cup and proceed game play.



Figure 5. Percent of Leaders Present Chip Example

Percent of Soldiers Present Chips

- Percent of Soldiers Present Chips represents the percentage of soldiers that become assigned to the unit.
 - a. On the second (2), third (3), and fourth (4) Roll: A D6 is rolled to identify the total percentage of soldiers assigned to the unit's forcestructure in each platoon.

- b. Additional opportunities to pull one Percent of Soldiers Present Chips come in turns three (3), six (6), and nine (9) when the player can select to either pull Percent of Leaders or Soldiers Present Chips.
- c. If the player selects to pull a Soldiers Present Chip during turns three (3), six (6), and nine (9) no D6 is rolled, the player randomly selects one chip to reveal the percent increase in solders present.



Figure 6. Percent of Soldiers Present Chip Example *Source:* Created by author.

Commander's Influence Chips

Commander Influence Chips represents the commander's emphases to complete specific events. Players are provided with three Commander Influence Chips at the start of game play and no additional chips can be obtained. The chips can be played anytime during turns one (1) through eleven (11) when an event is not completed to standard or achieves the desired completion rate. When using a Commander Influence Chip, the player is given the opportunity to reroll the D10 to acquire a higher event completion rate.



Figure 7. Commander's Influence Chip Example

Battalion Coordination Chips

Battalion Coordination Chips represents the synchronization effort between company commander and battalion staff. Players are provided with two Battalion Coordination Chips at the start of game play and no additional chips can be obtained. The chips can be played anytime during turns one through eleven when an event is not completed to standard or achieves the desired completion rate. When using a Battalion Coordination Chips, the player is given the opportunity to achieve the events desired completion rate by way of completing the event at a later time with a sister unit and not affect the units training plan.



Figure 8. Battalion Coordination Chip Example

Company Training Running Estimate

 The Company Training Running Estimate card serves as a training tracker and situational understanding tool of what has transpired throughout the game. Additionally, the Company Training Running Estimate can assist the player understand how events out of their control can influence subsequent turns and training quarters. Therefore, the player is provided a tool that can assist in developing a better strategy or make better decisions in future game play.

APPENDIX B

PARTS AND ACCESSORIES

Required Game Pieces for Each Player

1ea D6 Die
1ea D10 Die
1ea Dry Erase Markers
1ea Dry Erase Eraser
45ea 1" x 1" Square Color Tiles
25ea Color Printed Game Cards
2ea 16-ounce Solo Cup

Assembling "Next Year is Now"

Step 1. Take the game board cards one trough five and fold the 8.5' horizontal edges.

Step 2. Tape all five game board cards together to make the 12-month planning horizon.

Step 3. Cut out all 45 game chips and tape each piece on one of the 45 1" x 1" Square

Color Tiles.

Step 4. Place all 20 assembled Percentage of Leaders Present Chips in the 16-ounce Solo Cup.

Step 5. Place all 20 assembled Percentage of Soldiers Present Chips in the additional 16ounce Solo Cup.

Step 6. Place the three assembled Commanders Influence Chips near the D6 and D10.

Step 7. Place the two assembled Battalion Coordination Chips near the D6 and D10.

Step 8. Cut out all 216 game cards and stack them together in like color of writing.

Ŭ	Company Alpha, 1-1	ıy Alpha, 1-100 th Infantry Battalion	-[
	Unit Co	Unit Composition	
Command Team	Roll #1	 Commander Executive Officer First Sergeant 	% of Soldiers Present Add all %'s & / by 3 = Total
First Platoon	% of Leaders Present	 Platoon Leader Platoon Sergeant Rifle Squad Leader Rifle Squad Leader Rifle Squad Leader 	Roll #2 100% (6) 90% (5) 80% (4) 70% (3) 60% (2)
Second Platoon	 90% = (-2) 85% = (-3) 80% = (-4) 75% = (-4) 70% = (-6) 	 Weapons Squad Leader Platoon Leader Platoon Sergeant Rifle Squad Leader Rifle Squad Leader Rifle Squad Leader Weapons Squad Leader 	Roll #3 2 100% (5) Roll #3 100% (5) 20% (5) 20% (4) 20% (1) 50% (1)
Third Platoon		 Platoon Leader Platoon Sergeant Rifle Squad Leader Rifle Squad Leader Rifle Squad Leader Weapons Squad Leader 	Roll #4 100% (6) 90% (5) 80% (4) 70% (3) 60% (2) 50% (1)

Figure 9. Unit Composition Card

Planni	Ining Horizon	rizon				
Mont		Drill Schedule (Recommended Mandatory Training)	e (Recommei	nded Mandat	tory Training)	
c Star		1	2	2	3	3
1	1	2	1	2	1	2
2	3	4	3	4	8	4
3	5	9	5	6	5	9
4	7	8	7	8	2	8
TOTAL DAYS	DAY(S)		DAY(S)		DAY(S)	

Figure 10. Game Board Card Number One

Drill Sc					
	hedule (Reco	Drill Schedule (Recommended Individual, Crew, & Squad Training)	dividual, Crev	v, & Squad Tr	raining)
	4	5		9	9
1	2	1	2	1	2
3	4	3	4	3	4
5	9	5	6	5	9
7	8	7	8	2	8
DAY(S)		DAY(S)		DAY(S)	

Figure 11. Game Board Card Number Two

raining)	9	2	4	9	8		
v, & Squad Ti	5	1	3	5	2	DAY(S)	
dividual, Crev		2	4	6	8		
mmended Inc	8	1	3	5	7	DAY(S)	
Drill Schedule (Recommended Individual, Crew, & Squad Training)		2	4	6	8		
Drill Sch	2	1	3	5	7	DAY(S)	

Figure 12. Game Board Card Number Three

ended Collective Tasks) 11	1 2 3 4 5 6	7 8 DAY(S)	
Drill Schedule (Recommended Collective Tasks) 10 11	1 2 3 4 6	7 8 DAY(S)	

Figure 13. Game Board Card Number Four

Planning Horizon	Annual Training (Recommended MET Proficiency)	12	3 4 5 6	External Evaluation 12 13	AT Days can augment Drill Days.	Roll 9: Battalion Commander's consolidated training requirements at beginning of AT. Role once to find out total days.	
Planr	ll Training (Re		Training	6	Drill/TRVL		
	Annua		1 Consolidated	8	Recovery J Turn In		
			Drill/TRVL	7	14		

Figure 14. Game Board Card Number Five

cie (FM 7-0, 2016)	Green Cycle Training No Notice Event	METL Supporting Collective Tasks	Conduct Troop Leading Procedures for Companies Any Mobilization in Support of Real World Defense Support of Civil Authorities (DSCA) Mission Integrate Indirect Fire Support by Fire Defense Support of Civil Authorities (DSCA) Mission Integrate Indirect Fire Support Conduct Support by Fire Defense Support of Civil Authorities (DSCA) Mission Integrate Indirect Fire Support by Fire Defense Support of Civil Authorities, But Enhance Integrate Direct Fires Overall Unit Performance) Integrate Direct Fires Overall Unit Performance) Situational Training Exercise Overall Unit Performance) Situational Training Exercise Complete for EXEVAL) Situational Training Exercise Complete for EXEVAL) Crew Drills / Gunnery Tables (The Completion of Both Tasks will Increase Overall Rating by 1 Level) Defense Support of Both
Applying the Time Management Cycle (FM 7-0, 2016)	Amber Cycle Training Green C	Warrior Tasks & METL Battle Drills Colle	1. Employ Hand Grenades 1. Conduct 1 2. Move under Direct Fire 1. Conduct 3 3. Move over, Through, or Around 2. Conduct a 3. Move over, Through, or Around 2. Conduct a 4. React to Indirect Fire While 3. Integrate 1 5. Select Hasty Fighting Positions 4. Conduct Si 6. Move as a Member of a Fire 3. Integrate 1 7. Use Visual Signaling Techniques 6. Integrate 1 7. Use Visual Signaling Techniques 6. Integrate 1 8. Perform Voice Communications 9. Identify Visual Indicators of an 1 9. Identify Visual Indicators of an 1 1. Situationa 10. React to Possible Improvised Explosive Device 2. Crew Drills 10. React to Possible Improvised 2. Crew Drills 11. Search an Individual in a 2. Crew Drills 12. Battle Drills 1: React to Contact 1. Tasks 12. Battle Drills 1: React to Contact 1. Tasks 12. Battle Drills 1: React to Contact 1. Move to Colloction Tasks Move to Colloction Tasks 1. React to Contact
Ap	Red Cycle Training	Mandatory Training	 Flu Shot Requirement Mandatory Briefs Family Readiness Group Event Family Readiness Group Event Periodic Health Assessment Periodic Health Assessment Army Physical Fitness Test Army Physical Fitness Test Army Physical Fitness Test Fegge Targets with Your Fagge Targets with Your Fourt Assigned Weapon (IWQ) Feents Must Be Complete Annually)

Figure 15. Time Management Cycle Card

		Victory Point	Wager					
	Assess	Task As	sessment	T	ŕ	٩	ġ	U
eria		Perfo	eader mance res 'GO'	>=90%		- %68-08		<≃/⊎%
Lit.		% O Pento Measu	ritical mance res 'GO'		Ы		:	¢∧
L L	Execute	% Perk Measu	rmance res 'GO'	>=81%	80-90%	65-79%	51-64%	<=50%
<u>.</u>	ĕ	Extern	al E val	Y	es		No	
uat	-	% of S	oldiers sent at		>=80%	75-79%	60-74%	<=58%
Eval		Pres	eaders entat Authorized	>=85%	75-84%	05-74%	60-64%	<≓8%
Objective T Evaluation Criteria	Plan and Prepare	Trai Envir (L/	ining onment V/C)		t. The virtual training		ion of this task and t e used during crawl ve training.	
ō	ana	금본			Night		D	ay
	ä	Operational Environment	CO & BN	Dynamic and Complex (4+	OE Variables and Hybrid Threat)	Dynamic	(Single Threat)	Static (Single Threat)
After conducting Commander's Assessment plaver	must make a wager as	to what level the unit will be assessed at by	end of Annual Training.	-	 Point wager boxes will be a reduction of 1 Victory Point. No additional 	points are awarded if a higher rating is achieved.	 Victory Points can be achieved if a lower rating is achieved if the 	reasoning can be justified at games end.

Figure 16. Objective T Evaluation Criteria & Wager card

Source: U.S. Training and Doctrine Command, *Rifle Company (IBCT) Standardized METL Handbook* (Fort Benning, GA: U.S. Government Printing Office, 2017), 2.

Force Multiplier Points	The Player with the most points in each category receives 1ea Victory Points at Games End Force Multiplier Points can be used to improve each event role on every turn. The use of a Force Multiplier Points will equate in the equivalent reduction of points. 1 Force Multiplier Point equals an additional 10% per event role.	e 1 2 3 4 5 6 7 8 9 10 , fellowship, and loyalty)	itiae things independently	7) Coordination 1 2 3 4 5 6 7 8 9 10 The organization of a complex body or activity so as to enable them to work together effectively)	8) Synchronization 1 2 3 4 5 6 7 8 9 10 (The operation or activity of two or more things at the same time or rate)
	 The Player with the Force Multiplier Pc The use of a Force 1 Force Multiplier 	5) Morale (Shared feeling of pride, fellowship, and loyalty)	6) Initiative (Ability to assess and initiate things independently)	7) Coordinatio I	8) Synchro (The operation or activity of t

Figure 17. Force Multiplier Points Card



Figure 18. Game Chips

Source: Created by author.



Figure 19. Event Card One



Figure 20. Event Card Two



Figure 21. Event Card Three



Figure 22. Event Card Four



Figure 23. Event Card Five



Figure 24. Event Card Six



Figure 25. Event Card Seven



Figure 26. Mission Resource Card



Figure 27. Training Card One



Figure 28. Training Card Two



Figure 29. Training Card Three



Figure 30. Training Card Four



Figure 31. Training Card Five



Figure 32. Training Card Six

		Company 7	Company Training Running Estimate	ning Estim	late	
Quarters	% of Leaders Present	% of Soldiers Present	Completed R/A/G Cycle Training	Rescheduled R/A/G Cycle Training	Unscheduled Or No Notice Events	Sowhat
1st QTR						
2 nd QTR						
3 rd QTR						
4 th QTR						
NOTES:						

Figure 33. Company Training Running Estimate Card

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