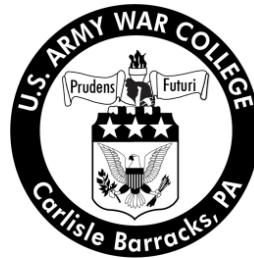


Civilian Research Project USAWC Fellow

A New Drill Weekend for the Information Age

by

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United States Army National Guard



United States Army War College
Class of 2013

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Abstract

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The United States National Guard is the primary organized reserve force for the Army and Air Force. The National Guard conducts 48 inactive duty for training (IDT) a year and participates in 15 days of annual training. Title 32, U.S.C. section 502(a) (1), establishes this requirement. With impending budget cuts across the Department of Defense and the advancements in technology, it is time to revisit how the National Guard performs IDT periods. This paper examines how the Army National Guard currently prepares and conducts training for IDT periods. The paper outlines how information technology advancements in broadband and mobile devices created a mobile workforce. Finally, the paper concludes with a proposed change in policy for managing and conducting IDT periods in the future.

A New Drill Weekend for the Information Age

In the 21st century, information technology pushes innovation at a very rapid pace. The world has become more global and mobile. The launch of Facebook (2004) and Skype (2005) made global communication extremely accessible. The iPhone (2007) and the growth of high-speed wireless networks (3G/4G) made it possible for these programs, as well as many others to become mobile. Because of these innovations, personal and business lives began to converge. Businesses started to re-evaluate their organizational culture and develop new policies to address a mobile workforce. Based on advancements in mobile technologies, many organizations, including the National Guard, need to recognize the impact of mobile technologies on its own culture. For the National Guard, technological advancements create an opportunity to implement a new training model emphasizing personalized distant learning for a mobile workforce.

The National Guard culture originates with the National Defense Act of 1916¹ when the term National Guard became mandatory. From 1916 to 2012, the National Guard evolved into an operational force of “358,200 for the Army National Guard (ARNG) and 106,700 for the Air National Guard (ANG).”² The National Guard follows U.S. Code, Title 32, Section 502³ dated 1956 which states the National Guard assembles for drill at least 48 times and “participate in training at encampments, maneuvers, outdoor range practice or other exercises, at least 15 days each year.” This policy has stood the test of time for the last 57 years with only minor changes.

In last ten years, the National Guard faced significant changes regarding training.

First, the National Guard supported the War on Terrorism, where the focus of training shifted from the armory to regional training centers to prepare National Guard units for deployments in Afghanistan and Iraq. As the War on Terrorism draws down, the armory becomes the primary training site once again. Secondly, individual training requirements moved from the classroom to online. Lastly, information technology advancements gave Guardsmen mobility. As a result, the National Guard needs to change policies and procedures that support centralized Inactive Duty Training (IDT) periods.

This paper examines how the Army National Guard currently prepares and conducts training for IDT periods. The paper outlines how information technology advancements in broadband and mobile devices created a mobile force. Finally, the paper concludes with a proposed change in policy for managing and conducting inactive duty training periods in the future.

Army National Guard Training

Training Regulations

Army National Guard Units rely on multiple regulations, Army Doctrine Publications (ADP), pamphlets, and assessments to build a training plan for each training year based upon 48 IDT and a 15-day annual training. The Army Force Generation (ARFORGEN) model assists the unit when structure and prioritize training objectives based on where the unit is in the cycle: reset, train-ready, and available. Two documents, Army Regulation (AR) 350-1: Army Training and Leader Development and National Guard Regulation (NGR) 350-1: Army National Guard Training, are requisite for implementation.

AR 350-1 outlines the initial guidance on unit level training. The regulation states “the commander’s primary responsibility is to ensure his unit can perform its mission essential tasks (MET) the unit was designed to perform across the spectrum of conflict in contemporary operating environment, and when assigned, another mission.”⁴ Each unit develops a mission essential task list (METL) for each training year. The METL consists of 3-5 tasks the unit performs collectively based on its war fighting functions. The war fighting functions include movement and maneuver, intelligence, fires, sustainment, mission command and protection. FM 7-15: The Army Universal Task List⁵ provides a list of tasks for the war fighting functions. Units strive to become proficient in the identified tasks for their war fighting function. In the National Guard, MET training occurs primarily at Annual Training (AT).

Other training requirements derived from AR 350-1 include leader training through Officer Professional Development (OPD) and Noncommissioned Officer Development programs, combatives and chemical, biological, radiological, and nuclear (CBRN) defense training. Table 1, shown below as Table G-1 of AR 350-1 summarizes the mandatory training requirements for the units. Table G1 lists 24 training requirements and the frequency training need to occur throughout the year. The majority of the subjects occur annually. Some of these tasks require additional resources, for example, weapons qualifications. Thus, the unit completes the task collectively. Soldiers may complete individual tasks by using web-based training modules found on various Army websites.

Table 1: Mandatory Training Requirement in Units

Table G-1 Mandatory training requirements in units			
Subject	Reference	Proponent	Frequency
Antiterrorism training	AR 525-13	PMG	A
Army physical fitness training	AR 350-1	HQDA, DCS, G-3/5/7	O
Army Substance Abuse Program	AR 600-85	HQDA, DCS, G-1	I/A/R
Army Suicide Prevention Program	AR 600-63	HQDA, DCS, G-1	A/P/R
Army Traffic Safety Training Program	AR 385-10	HQDA, ACSIM	I
Army Warrior Training	https://atiam.train.army.mil/soldierPortal/	HQDA, DCS, G-3/5/7	A
CBRN Defense training	AR 350-1	TRADOC	A
Combating Trafficking in Persons (CTIP) Program	http://www.combat-trafficking.army.mil/	ASA(M&RA)	A/P
Composite Risk Management	AR 385-10	TRADOC	O
Cultural awareness training	AR 350-1 Chapter 8	TRADOC	P
Employment and reemployment rights (RC only)	DODI 1205.12	HQDA, DCS, G-1	A/P/R
Equal Opportunity Program	AR 600-20	HQDA, DCS, G-1	S
Ethics (see details below)	DOD 5500.7-R	TJAG	Initial entry
Fraternization	AR 600-20	HQDA, DCS, G-1	A
Law of War / Detainee Ops	DODD 2311.01E	TJAG	A/P
Modern Army Combatives Program	AR 350-1	TRADOC (USACS)	O
Operational security (OPSEC)	AR 530-1	HQDA, DCS, G-3/5/7	I/A/P/R
Personnel Recovery	AR 350-1	HQDA, DCS, G-3/5/7	A
Prevention of Sexual Harassment	AR 600-20	HQDA, DCS, G-1	S
Preventive measures against disease and injury	AR 40-5	TSG	P
Resilience training	www.battlemind.army.mil	MEDCOM	P/R
SAEDA	AR 381-12	HQDA, DCS, G-2	A
Sexual Assault Prevention and Response Program	AR 600-20	HQDA, DCS, G-1	A/P/R
Weapons qualification	DA Pam 350-38	HQDA, DCS, G-3/5/7	S (AA) A (RC)

Legend for Table G-1:
The following codes establish the frequency at which training is to be conducted:
A: Annual. Trained annually.
I: Inprocessing. Required whenever an individual is assigned to a new unit.
O: Ongoing. Continuous training, not a single event.
P: Pre-Deployment. Addressed before unit is deployed on an operational mission.
R: Redeployment. Addressed upon redeployment from an operational mission.
S: Semiannual. Trained twice per year.

Notes:
¹ *Published pre-deployment training guidance supersedes training requirement frequency contained herein.

Furthermore, AR 350-1 allows Soldiers to supplement unit training by focusing on support and technical skills. The “My Training” link at Army Knowledge Online (AKO) provides distant learning opportunities delivered through different platforms: PowerPoint presentations, videos, and computer-based training modules. Many other training

resources exist like Army E-learning and LandWarNet e-University. AR 350-1 applies to both the Active Component and the Reserves.

For Army National Guard units, the National Guard Bureau sets training guidance and requirements in NGR 350-1. It identifies two training objectives: (1) “train units that can mobilize, deploy, fight and win anywhere in the world” (2) “organize units or personnel for defense support of civil authorities (DCSA).”⁶ NGR 350-1 requires units to develop a Yearly Training Plan (YTP). The YTP schedules the training objectives “during specific Inactive Duty Training (IDT) and Annual Training (AT) periods.”⁷ NGR 350-1 places training responsibilities upon the commander.

Thus, AR 350-1 and NGR 350-1 provides guidance for each of the 50 states, territories, and the District of Columbia to develop their own 350-1 / Command Training Guidance (CTG) document for the units within their own command and control (C2). The Adjutants General (TAG) for each of the 50 states, territories, and the District of Columbia conduct Yearly Training Briefs (YTB). Major Subordinate Commands (MSC) brief the TAG to receive the approval for the MSC YTP. The YTP identifies the training objectives for the 48 IDT and a 15-day AT.

A standard “drill weekend” consists of four IDT periods. Commanders add or subtract IDT periods for each month based on the resources and the training objectives for the training year. Commanders must perform 48 IDT for each training year. The YTP provides the basis for the Yearly Training Calendar (YTC). Monthly training schedules derive from the YTC.

Typical Drill Weekend

A monthly training schedule identifies the tasks the commander wants to concentrate on for the weekend. Some of the most common events include physical fitness training, preventive maintenance checks and services on unit equipment, mandatory briefings, administrative and supply actions, staff and training meetings, professional development training for officers and non-commission officers, and counseling sessions. These events happen at an individual or small group level. To accomplish individual training, Guardsmen use computers at the armory or personal laptops to complete mandatory web-based training. Small group training, on the other hand, occurs in a classroom or on the drill floor with an instructor, who may use PowerPoint or other training aids to enhance learning. Thus, on a typical drill weekend, the focus centers around individual and small group training using the resources found at the armory.

For collective training, such as weapons qualification, convoy operations, and staff or field exercises, typically the unit trains at a regional training center or an active duty post. Training centers provide more training resources than the armory. To accomplish the training, units bring and set up their own equipment or use the fixed facilities at the training site. For these weekends, Guardsmen perform five to six IDT periods. Units attempt collective training at least once a quarter; however, this may vary by the type of unit and resource availability. Collective training provides Guardsmen the opportunity to learn new skills beyond the limitations of the armory. As a result, Guardsmen prefer collective training.

Mobile Force

Broadband

Government computers can only access the fixed broadband services that exist in armories. The rationale for this limitation includes security, limited funding to the Army National Guard to access the Army networks and the Internet,⁸ and the age of the armories and their restrictive layout. Normally, full-time staff and key leaders of the unit maintain government computers. Kiosk computers do provide Internet access for the remainder of the unit. Two issues exist with the Kiosk computers. First, the limited number of Kiosk computers set up in an armory does not meet the demand by the unit. Secondly, outdated Kiosk computers are extremely slow, which makes it difficult to complete computer-based training that streams enormous video content. Therefore, Guardsmen compensate for the lack of computers and broadband services by bringing laptops and using public wireless networks to complete computer-based training in the armories. Yet, the latest reports from the FCC, U.S. Department of Commerce, and the CTIA-The Wireless Association prove Guardsmen do not need the armory for broadband access. They own the technology in their homes and have access to a mobile carrier.

The Broadband for America website states, “the term broadband commonly refers to high-speed Internet access. Broadband defined is a fast connection to the internet that is always active. It allows a user to send emails, surf the web, download images and music, watch videos, join a web conference, and much more.”⁹ The website also lists the following common access methods: Digital Subscriber Line (DSL), cable

modem, fiber, wireless, satellite, and Broadband over Power lines (BPL).¹⁰ Several reports about broadband usage in the U.S. occur annually, notably, the Federal Communications Commission (FCC) annual report. The FCC must provide an annual report regarding the progress of broadband deployment in the United States per the Telecommunications Act of 1996.¹¹ In the FCC's Eighth Broadband Progress Report published in August 2012, the report stated, "6 percent of the population still lack access to fixed broadband services."¹² The 6 percent of Americans lacking access to broadband services fall into three categories: (1) live in rural areas, (2) live in tribal areas and (3) choose not to subscribe.¹³ In a different report from The U.S. Department of Commerce published in 2010, the report highlighted "between 2001 and 2009, broadband Internet use among households rose sevenfold, from 9% to 64%."¹⁴ In a recent survey, the Leichtman Research Group concluded, "nearly 90% of U.S. households that use a laptop or desktop computer at home currently subscribe to a broadband Internet Service."¹⁵ The Leichtman Research Group used a smaller sample survey than the FCC and the U.S. Department of Commerce. The fact remains the usage of broadband services in U.S. homes rose significantly over the last five years where today, 94% of Americans use fixed broadband services.

More impressive than the rise of fixed broadband is the rise of wireless. CTIA-The Wireless Association¹⁶ reported the following statistics about the growth of wireless subscriber connections.

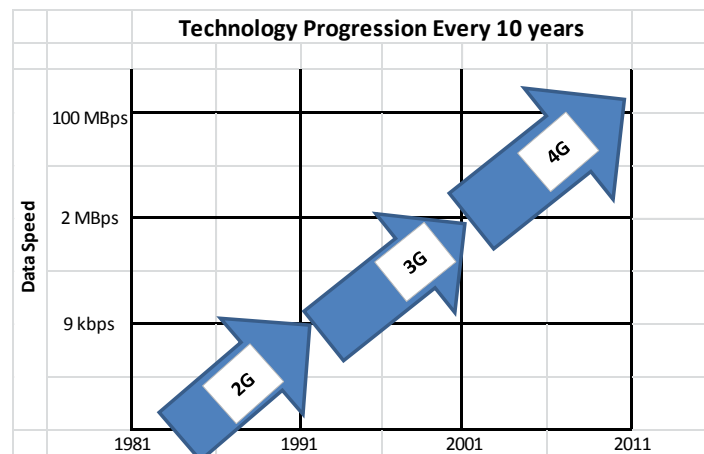
Table 2: Wireless Subscribers

Jun 12	Jun 07	Jun 02	Jun 97
321.7 M	243.4 M	134.6 M	48.7 M

As shown in Table 2, wireless subscribers practically doubled every five years. Wireless broadband growth became an initiative of President Barrack Obama in 2011. The initiative called the National Wireless Initiative “set the goal of enabling business to provide high-speed wireless services to at least 98 percent of all Americans within five years.”¹⁷

In a White House press release announcing the National Wireless Initiative, the press release refers to investing and deploying 4G technology. Currently, the locations of 4G networks exist in major U.S. cities. 4G is the standard for fourth generation mobile communication. Mobile carriers began offering 4G technology in 2011. The range of speed for 4G communication averages around 3-5 Mbps. Previous generations 1G and 2G used analog communications and reached speeds of 14.4 kbps. 3G provided consumers with both analog and digital communication on their phones at speed of 500-700 kbps.¹⁸ Today, mobile phone customers connect at 3G or 4G speeds. Researchers have started development of a 5G communication standard. The projected speed of 5G networks may reach a gigabit. Based on the release dates of previous generations, 5G availability could occur in 2021. Figure 1 illustrates the changes in mobile communication standards over ten year increments and the increase in data speeds.

Figure 1: Mobile Communication Standards (Chart recreated from “Emerging Wireless Technologies”¹⁹)



U.S. residents depend on fixed and wireless broadband networks to access the Internet at high speeds. The amount of subscribers increased significantly in the last five to ten years. With the advancements in wireless technology, mobile users' now obtain network speeds of 3-5 Mbps. Due to increased data transfer speeds, wireless technologies now enable the bandwidth required to deliver learning content, anywhere at any time.

Growth of Mobile Devices

The proliferation of mobile devices using broadband services created the rise of broadband usage. Mobile devices create an always “on” environment. Thus, smaller and lighter devices with touchscreen capabilities make it possible for U.S. consumers to use a different mobile device at home or on the go. A wide range of mobile devices exists based on the functionality needed. For example, a user may use a Smartphone to manage contacts and calendar information, and a tablet to read news stories,

magazines, and books, and a laptop computer to check email and type correspondence. As a result, “The average number of devices carried by a mobile worker is now 2.95 devices, down from 3.5 in 2012.”²⁰ The top three devices carried by the mobile workers include the laptop, tablet, and Smartphone. The sales of each device increased rapidly throughout the 2000’s.

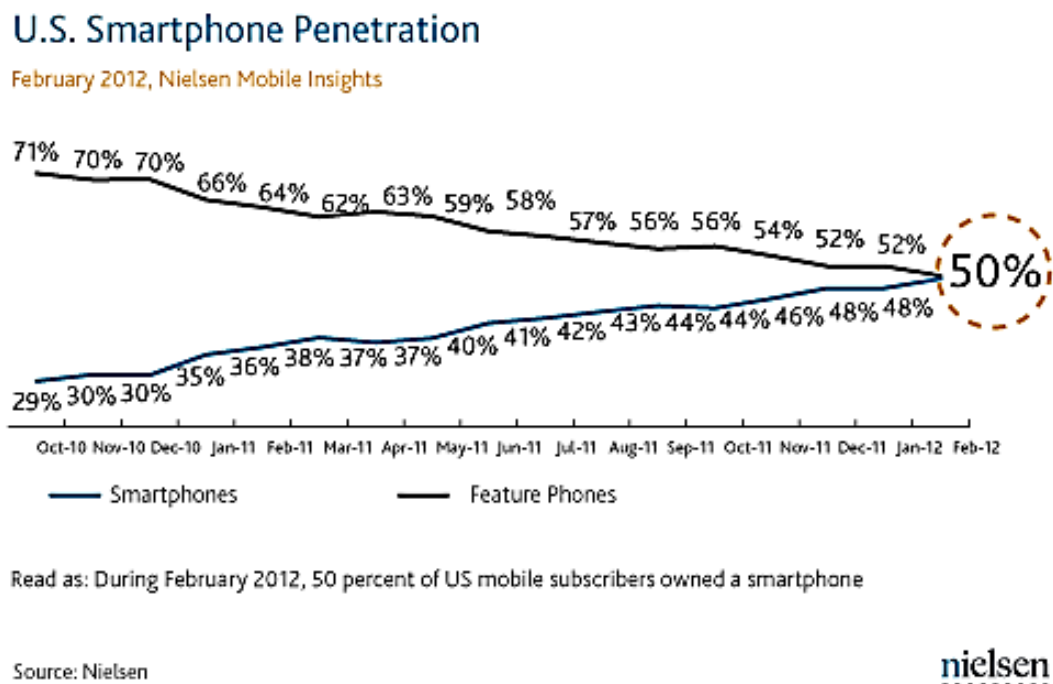
A milestone in the commercial success of the laptop occurred in 2005 when laptop computers “surpassed desktop sales in the U.S. retail segment for the first time.”²¹ Five years later, Gartner published, “Worldwide mobile PC shipments totaled 49.4 million units in the first quarter of 2010, a 43.4 percent increase from the first quarter of 2009. That’s the single highest year-over-year growth percentage in eight years.”²² Today, the predictions of laptop sales indicate a decline in growth. One explanation given “consumer enthusiasm for media tablets” and “consumers are taking a ‘wait and see’ attitude toward PCs as they anticipate the arrival of new media tablets.”²³

Since the release of the iPad in 2010, tablets sales continue to increase. According Gartner, “Worldwide media tablet sales to end users are forecast to total 118.9 million units in 2012, a 98 percent increase from 2011 sales of 60 million units.”²⁴ Another prediction put forth by Gartner provides insight to the use of tablets by consumers. “Gartner expects enterprises to allow tablets as part of their buy your own device (BYOD) program. More of these tablets will be owned by consumers who use them at work.”²⁵

Smartphones did not make an upsurge in the market until the early 2000’s with the release of the Blackberry from Research in Motion (RIM), and the Treo from Palm.

Then, in 2007, Apple entered the Smartphone market with the iPhone. The iPhone provided a touchscreen display and web-browsing, thus, setting the standard for Smartphones. Today, iPhone, Google Android, and many other manufactures make it possible for consumers to carry a very small computer that is capable of performing a multitude of functions for the cost of “\$200 and up.”²⁶ The below chart provided by Nielsen clearly demonstrates the shift from feature phones to Smartphone. “Almost half (49.7%) of U.S. mobile subscribers now own Smartphones, as of February 2012, an increase of 38 percent over the last year.”²⁷

Figure 2: U.S. Smartphone Penetration



Based on the growth of the laptop, tablet, and the Smartphone, a few conclusions come to the forefront regarding mobile devices. First, laptops, tablets, and Smartphones improved over time because of advancements in technology, design, and

usability. Second, once accepted by consumers, sales increased at a rapid pace. On the other hand, sales spikes did not last long because of the emergence of new products into the market. For example, tablet sales started to take away from laptop sales in 2011. As the third conclusion, mobile devices become “hybrid” of each other. For example, Microsoft’s Surface combines a tablet with a detachable keyboard that runs Windows 8 combining mobile applications with a traditional operating system. Lastly, mobile devices started “the convergence of personal and business devices – in particular, the incorporation of Smartphones such as iPhone, the Blackberry, and the Droid.”²⁸

Military and Mobile Devices

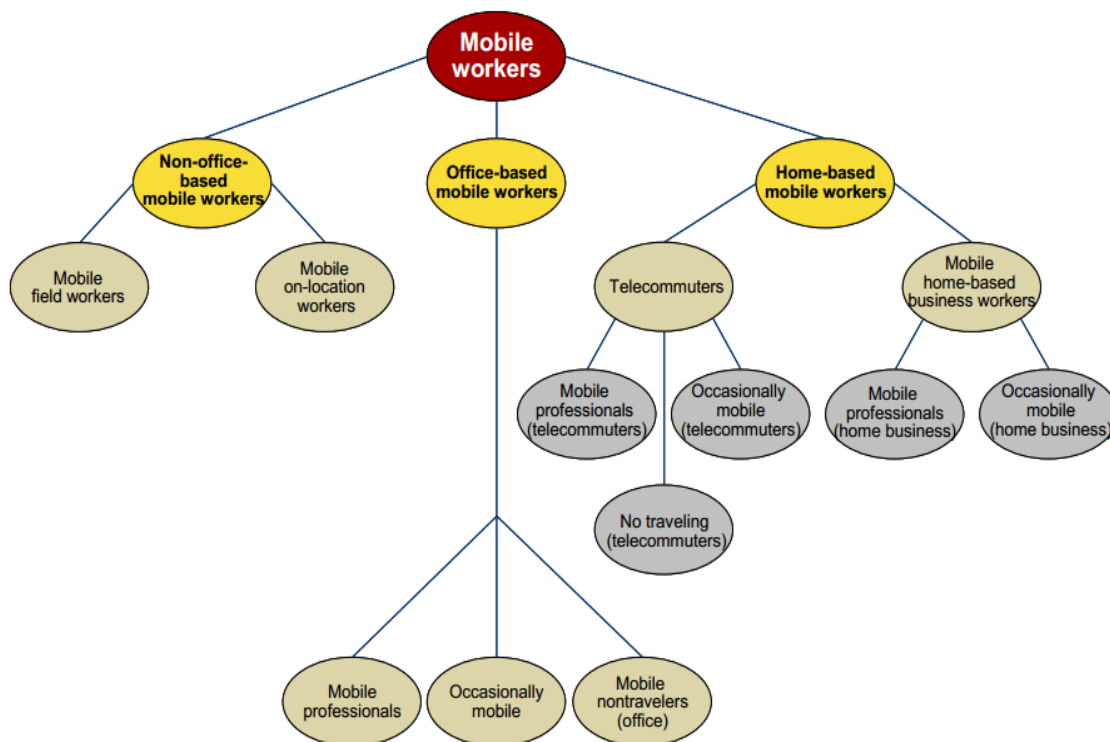
As mobile device usage grows, Soldiers demand to use mobile devices as part of their daily military duties. According to a recent Army Times article, the Department of Defense (DoD) top tech officials “issued a long-awaited plan for military use of mobile devices.”²⁹ The DoD did not select a mobile device or tablet; instead, DoD plans to release technical specifications at a later date and let individual commands select from commercial phones and tablets. The announcement of a mobile device plan for the military is a move in the positive direction. Yet, the impact on the National Guard at this time is unknown. The National Guard will most likely replace mobile devices currently in use and not issue mobile devices to every Guardsman. Thus, large portions of the National Guard continue to rely on personal mobile devices to assist them in completing online training offered by the military.

Mobile Worker

Three segments exist for information workers or mobile workers according to IDC Research's mobile worker population hierarchy. The mobile worker population hierarchy demonstrates the mobile worker no longer belongs to the "top tier of employees"³⁰ in an organization (See Figure 3). Furthermore, "employees once tied to their desks are now more likely to work remotely."³¹ As a result, "the number of anytime, anywhere information workers has risen from 23% of the global workforce in 2011 to 29% in 2012."³² The advancements in technology like wireless networks, mobile devices and applications contributed to the rise of the mobile worker.

Figure 3: Mobile Worker Population Hierarchy³³

Mobile Worker Population Hierarchy



Source: IDC, 2009

Workshifting

Surveys conducted by iPass provide further insight to the rise of a mobile workforce beyond technology advances. Mobile workers “felt more efficient and productive because of their flexible work schedules – what we are calling workshifting.”³⁴ In fact, “workshifting has now become the expectation of nearly all business employees.”³⁵ Workshifting supports an always “on” environment. It is not uncommon for the mobile worker to use mobile devices during “unoccupied moments of the day.”³⁶ These unoccupied moments occur in a variety of places. “The most common place outside the office is the homes, with 47 percent working from home daily and 99 percent at least occasionally.”³⁷ With the ability to choose the time and place to work, employees feel more productive and efficient. As a result, the demand for flexible work schedules continues to grow and affects employee retention. “If mobile employees aren’t getting enough flexibility at work, 33 percent would seek employment elsewhere, 57 percent would be less satisfied with their job, and 45 percent would feel less productive.”³⁸ As a result, employers look to develop policies for a mobile workforce to capitalize on productivity and retain employees.

The Future of Drill Weekend

Background

Today, the National Guard training faces the challenge of irrelevance due to rapid changing technology and the desire for decentralize training. The Army continues to develop “more online, gaming technology-based training simulators in order to reduce travel to centralized training sites.”³⁹ For years, the solution focused on modernizing

armories or building regional training centers. Today, the Army National Guard maintains “26,132 buildings, including 2,237 armories and 110 training centers in 2,899 communities, and over forty percent of National Guard facilities nationwide are fifty years old or older.”⁴⁰ The challenge with modernization is the lengthy process to allocate funding and the costs associated with building improvements or building new armories. This process ranges from five to ten years, which does not keep pace with the changes in information technology. The pace of change for information technology averages 18 months based on Moore’s law. ⁴¹

An alternate solution is for the National Guard to provide Smartphones and tablets to every Guardsman. Today, the funding only supports over 100,000 users, approximately one-third of the total Army National Guard force, to access the Army Network and Internet. ⁴² The National Guard Association of the United States (NGAUS) brought attention to this fact in 2012. Based on the current budget cuts to the military, the likelihood of additional funding for Internet access or mobile devices looks dismal. Since time and funding constraints exist to modernize facilities and equipment, the National Guard needs to leverage the commercial technology Guardsmen use every day and schedule virtual drilling throughout the training year.

Virtual Drills

The yearly training plan needs to incorporate virtual drills, where Guardsmen conduct and complete training requirements online from home or another location. The online training may or may not be instructor led. The training needs to be from an authorized military training website or center. A virtual drill weekend equals four IDT

periods based on the same policy for a typical drill weekend. Virtual drill weekends need to occur in the training year at least once a quarter. Virtual drill weekends focus on individual and supplemental training outlined in AR 350-1 and NGR 350-1. Using electronic-based distance learning courses at home or on the move, Guardsmen complete the annual training requirements and then receive compensation for the completed training. Army Directive 2010-06 (Compensation of Reserve Component Personnel for Army Electronic-Based Distributed Learning) ensured compliance with the National Defense Authorization Act (NDAA) for Fiscal Year 2002. NDAA “authorized the Department of Defense (DoD) to pay monetary compensation to members of the Selected Reserve, including members of the National Guard, for successful completion of electronic-based distance learning courses.”⁴³ Even with the ability to provide compensation to Guardsmen, few units take advantage of virtual drilling throughout the training year.

Advantages of Virtual Drills

Virtual drills allow for flexibility. For Guardsmen, they control when and where to complete electronic-based distance learning courses. Tech-savvy Soldiers benefit because they get to use their own devices and do not have to compete for limited resources at the armory. With better use of time and resources, the focus returns to professional development and providing quality training at the individual and small group level. Furthermore, the unit then focuses its limited resources organizing and conducting collective training.

Virtual drilling provides cost reduction; it reduces the travel time and expenses occurred by the Guardsman attending drill. Additionally, the unit reduces lodging costs incurred by lower-rank soldiers attending drill outside a 50-mile radius. Another cost saving measure includes the operational costs associated with not having the armory in use every month. Virtual drills mitigate the need to modernize armories to support digital training.

A potential savings consists in restructuring the pay for IDT periods. For example, eight hours of training conducted virtually equals one day of pay or one IDT period. This change supports the 11th Quadrennial Review of Military Compensation, which recommended Reservists should receive full pay and allowances for each day of duty regardless of the type or purpose of duty. Currently, a Guardsman earns one day of base active duty pay for each IDT performed. For example, the base pay rate in 2013 for a second lieutenant with than less than two years of service equals \$2,876.48. Divide \$2,876.48 by 30, the daily pay equals \$95.88. Thus, a Guardsman of equivalent rank and time in service receives \$95.88 for one IDT period (equivalent of four hours). A typical drill weekend consists of four IDTs ($\$95.88 \times 4 = \383.53).

Disadvantages of Virtual Drills

As discussed in the previous paragraph, completion hours dictate the appropriate compensation. Many of the electronic-based distance learning courses do not quantify the course hours. A clear matrix needs to list the completion hours associated with mandatory training courses. Furthermore, completion hours need to appear on the certificate.

Another disadvantage includes an appropriate tracking mechanism. Electronic-based distant learning courses allow the Guardsmen to track progress and certificates of completion on an individual basis. In order for the unit to track progress, the Guardsmen must turn in a paper or electronic copy of the completion certificate to a training officer or NCO, who then tracks the completion manually or inputs the data in an automated system like the Digital Training Management System (DTMS). Then, the unit pay clerk processes the appropriate compensation. Either the unit receives permission to access the electronic base distant learning courses for updates, or an automated process needs to be created where the unit systems get updated on the progress of individual training. This would provide a more accurate method for the full-time staff and key leaders to track overall readiness on specific tasks.

A last point of discussion focuses on developing individual training/performance plans. By incorporating virtual drills, first-line supervisors need to work with subordinates to develop an appropriate plan that outlines the distant learning training objectives for the year. Then, commanders would establish suspense dates. If a Guardsman fails to complete the training, the first-line supervisor initiates the appropriate corrective actions as outlined in the commander's policy. Additionally, the first-line supervisor identifies any Guardsmen that cannot complete virtual drills. Then, the unit offers alternate training for those Soldiers.

Risks of Virtual Drills

By implementing virtual drills, two risks move to the forefront: security and fraud. Today, electronic-based distance learning courses use unclassified military websites. All

military websites require common access card (CAC) authentication. Virtual drilling relies on these sites. Nevertheless, commanders need to verify training completion. The commander may choose to test or require additional information from the Guardsman to ensure compliance with training standards. The use of CAC authentication minimizes security and fraud issues but it does not eliminate them.

Conclusion

This paper only covered a few of the advantages, disadvantages and risks associated with incorporating virtual drill weekends throughout the training year. The proposal of virtual drills provides Guardsmen the flexibility to meet training requirements when it is convenient for them no matter the time or place. Guardsmen civilian employers recognize the importance of workshifting so must the National Guard. If the National Guard fails to leverage mobile technologies and allow for mobile work, it faces the potential of not retaining its force. Thus, leaders in the National Guard need to look for solutions within the National Guard. The key to success lies in the Soldiers that proudly serve the National Guard and the technology they bring with them. Today, Guardsmen are pushing from the bottom up for change. The leadership should engage in opportunities promoting distant training and workshifting.

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