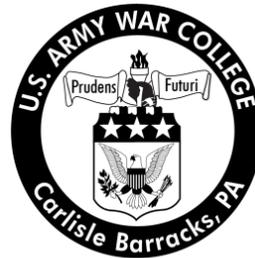


Building Readiness into National Guard Facilities

by

Colonel Michael A. Abell
United States Army National Guard



United States Army War College
Class of 2012

DISTRIBUTION STATEMENT: A

Approved for Public Release
Distribution is Unlimited

This manuscript is submitted in partial fulfillment of the requirements of the Master of Strategic Studies Degree. The views expressed in this student academic research paper are those of the author and do not reflect the official policy or position of the Department of the Army, Department of Defense, or the U.S. Government.

The U.S. Army War College is accredited by the Commission on Higher Education of the Middle States Association of Colleges and Schools, 3624 Market Street, Philadelphia, PA 19104, (215) 662-5606. The Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation.

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. **PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.**

1. REPORT DATE (DD-MM-YYYY) 28-02-2012		2. REPORT TYPE Strategy Research Project		3. DATES COVERED (From - To)	
4. TITLE AND SUBTITLE Building Readiness into National Guard Facilities				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S) Colonel Michael A. Abell				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Colonel Oliver Norrell Department of Command, Leadership, & Management				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Army War College 122 Forbes Avenue Carlisle, PA 17013				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION / AVAILABILITY STATEMENT Distribution A: Unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT The Army National Guard (ARNG) has a presence in 2,899 communities. In sum total, the ARNG has 26,132 buildings, including 2,237 armories and 110 training centers to support over 350,000 troops. Our role to support both the President of the United States and the Governor's of our respective States and Territories presents us with a requirement to be ready for war on short notice and ready for Military Support to Civilian Authorities (MSCA) on no notice. Our armories, were renamed "readiness centers", but they are not. They are undersized, in need of maintenance, do not support training at homestation, do not support the forces stationed in them, and do not support the joint and interagency needs of the force during MSCA events, both routine and catastrophic. In this research paper, I will determine exactly what requirements an armory must possess to earn the title "readiness center" and thus contribute to the ability of the unit to be ready for war and to support their local community, state, and neighboring state(s) for MSCA events. By, defining just exactly how a facility contributes to making the unit it houses ready, I propose to influence the future design of our aging facilities, before our leadership invests our precious resources into new facilities and remodeling.					
15. SUBJECT TERMS Homestation					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT UNLIMITED	18. NUMBER OF PAGES 26	19a. NAME OF RESPONSIBLE PERSON
a. REPORT UNCLASSIFIED	b. ABSTRACT UNCLASSIFIED	c. THIS PAGE UNCLASSIFIED			19b. TELEPHONE NUMBER (include area code)

USAWC STRATEGY RESEARCH PROJECT

BUILDING READINESS INTO NATIONAL GUARD FACILITIES

by

Colonel Michael A. Abell
United States Army National Guard

Colonel Oliver Norrell
Project Adviser

This SRP is submitted in partial fulfillment of the requirements of the Master of Strategic Studies Degree. The U.S. Army War College is accredited by the Commission on Higher Education of the Middle States Association of Colleges and Schools, 3624 Market Street, Philadelphia, PA 19104, (215) 662-5606. The Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation.

The views expressed in this student academic research paper are those of the author and do not reflect the official policy or position of the Department of the Army, Department of Defense, or the U.S. Government.

U.S. Army War College
CARLISLE BARRACKS, PENNSYLVANIA 17013

ABSTRACT

AUTHOR: Colonel Michael A. Abell
TITLE: Building Readiness into National Guard Facilities
FORMAT: Strategy Research Project
DATE: 28 February 2012 WORD COUNT: 5,668 PAGES: 26
KEY TERMS: Homestation
CLASSIFICATION: Unclassified

The Army National Guard (ARNG) has a presence in 2,899 communities. In sum total, the ARNG has 26,132 buildings, including 2,237 armories and 110 training centers to support over 350,000 troops. Our role to support both the President of the United States and the Governor's of our respective States and Territories presents us with a requirement to be ready for war on short notice and ready for Military Support to Civilian Authorities (MSCA) on no notice. Our armories, were renamed "readiness centers", but they are not. They are undersized, in need of maintenance, do not support training at homestation, do not support the forces stationed in them, and do not support the joint and interagency needs of the force during MSCA events, both routine and catastrophic. In this research paper, I will determine exactly what requirements an armory must possess to earn the title "readiness center" and thus contribute to the ability of the unit to be ready for war and to support their local community, state, and neighboring state(s) for MSCA events. By, defining just exactly how a facility contributes to making the unit it houses ready, I propose to influence the future design of our aging facilities, before our leadership invests our precious resources into new facilities and remodeling.

BUILDING READINESS INTO NATIONAL GUARD FACILITIES

The committee is aware that 40 percent of ARNG (Army National Guard) facilities are over 50 years old and about 40 percent of readiness centers do not adequately meet requirements for the support of training for the full range of mission essential tasks. In addition, based on the current force structure of the ARNG, there exists a deficit in readiness centers of 19.5 million square feet, 30 percent of the total current inventory. Finally, many readiness centers are located in areas that are not ideally positioned for current populations and demographic trends, which affects recruiting and retention. All of these factors have a detrimental impact on the readiness of the ARNG at a time when the high operations tempo of deployments to Iraq and Afghanistan are already taking a significant toll on the ARNG.¹

—Committee on the Armed Services of the United States Senate
June 4, 2010

Introduction

Senior leaders in the Army National Guard know one thing for certain, 10 years of war has refined our organization into something most of us could not have predicted in August of 2001. We are an operational force that is infinitely more capable and professional. Our soldiers are better, our equipment is modern, our skills are relevant and in demand, but our facilities are still relics of the Cold War. We lack facilities that support our new role and allow us to maintain our new role as an operational force.²

The Army National Guard (ARNG) has a presence in 2,899 communities. In sum total, the ARNG has 26,132 buildings, including 2,237 armories and 110 training centers to support over 350,000 troops.³ Our dual role to support both the President of the United States and the Governor's of our respective States and Territories presents us with unique requirements. We must be ready for war on short notice and ready for Military Support to Civilian Authorities (MSCA) on no notice. Our armories, were renamed "readiness centers", but they are not. Across the country, many of our armories are undersized, in need of maintenance, do not support training at

homestation, do not support the forces stationed in them, and do not support the joint and interagency needs of the force during MSCA events, both routine and catastrophic. So, they are readiness centers in name only.

Facilities have a life cycle, according to the Department of Defense of 67 years.⁴ Over forty percent of National Guard facilities nationwide are now fifty years old or older. Resources to replace facilities at the end of their life cycle have never been available. That fact remains true today and will be increasingly true in the near future.

The committee notes that the budget request for fiscal year 2011 contains 20 military construction projects totaling \$294.0 million to add to or replace ARNG readiness centers. At this rate of investment, it would take over 30 years just to address the critical requirements in inadequate readiness centers.⁵

While it is true that with proper maintenance facilities can exceed their expected life cycle, in most cases the resources have not been available to achieve that goal. Maintenance not performed this year is rolled into the next fiscal year's plan and over time it becomes fiscally untenable to upgrade a facility, because the cost to replace it is at or near the same price points. Even if certain facilities were maintained and were able to exceed their life cycle today, they were built post World War II to support a Cold War strategic reserve and thus they are still obsolete.

The discrepancy between our operational force and our strategic reserve facilities would be an issue worthy of addressing the replacement of facilities on its own. But coupled with the fact that ARNG facilities have reached the end of their life cycle the time to implement a creative solution is now. If we fail at this point to revitalize the facilities inventory in the National Guard, we may ignore the weak signal that reduces the readiness of our force that erodes our ability to maintain our role as an operational force.

Sherlock Holmes himself could not find a national security professional or a strategic leader that would argue at this point and time in our national history that the national deficit is not the greatest risk to the continued prosperity of our way of life. As senior leaders we almost universally acknowledge that we must find a way to continue to achieve our national interests with more finite resources. The question is and will continue to be, "How do we do it." In fact, we already know that the Future Years Defense Program (FYDP) accompanying this year's budget request to Congress cuts our current facilities funding by over sixty percent in 2015.⁶ The ARNG facilities deficit is just one issue of many across the Department of Defense where we have to think creatively and strategically about how we replace those facilities in our inventory. We've got to recapitalize our facilities inventory in a way that provides ARNG units a readiness center worth of that title.

In this research paper, I will proffer a creative solution to the issue illustrated above. I will define what qualities of a facility contribute to the readiness of a unit and which qualities detract from the readiness of a unit. By defining just exactly how a facility contributes to making the occupying unit ready, I propose to influence the future design of our aging facilities, before our leadership invests our finite resources into new facilities. The current fiscal environment is such that we cannot expect more resources to accomplish the goals I will suggest. But, at current funding levels, we should be able to plan, design, and begin the process. If we are to maintain our role as an operational force we must act now. We cannot afford to point to empty coffers and shrug our shoulders. The time to find a creative solution to this vexing problem is now.

Effect on Readiness

The linkage between facilities design and readiness of a unit has proven to be hard if not impossible to define. Throughout the current war we've adapted our Cold War methods, become more modular, inclusive and diverse in our ways of doing business from intelligence gathering and reporting to operations at the battalion level that are coalition and interagency dependant. We've eliminated stove-piped parochial methods of reporting and operations across the Department of Defense. By extending this inclusive and diverse analytical method of viewing the way we do business it is easy to derive a nexus between facilities design and readiness that already exists.

Commander's already report installations status via the Installation Status Report (ISR) and unit readiness via the Commanders Unit Status Report (CUSR). We have simply stove-piped commanders and operators and kept their readiness reporting separate from the installations management field. By combining the use and intent of the ISR and CUSR we can find begin to define the nexus of facilities design and readiness. The ISR is designed to report the condition of facilities. The CUSR is designed to report the readiness of units. Both reports are rolled up and reported to the Joint Staff and the Office of the Secretary of Defense at regular intervals and whenever requested to the National Command Authority and the U.S. Congress. However, they're reported within channels and separately define facilities status and readiness status. By drilling down into the reports and finding the currency that flows between the two, we can define how installations affect unit readiness.

It is appropriate at this point to define the major subcomponents of each report in order to illustrate the linkage and later to define the nexus.

The ISR has the following ratings used to capture the condition of facilities:

- C rating references Quantity – the amount of facilities present versus needed, based on the calculated requirement versus calculated need;
- Q rating references Quality – the quality of facilities based on a ratio of improvement versus replacement value as a percentage of dollars;
- F rating references Mission Support Functional Capability – the ability of a facility to contribute to or detract from the readiness of the occupying unit, according to an algorithm that gives weight to mission essential facility components and their absence or presence and current condition.⁷

The CUSR is a diverse report that defines unit readiness from multiple angles, but the most important is the C-level, or commander's overall rating. The C-rating states whether a unit is fully trained and resourced to accomplish its wartime mission or additional resources and training are necessary.⁸ The C-rating is determined by the unit commander based on the following measured ratings:

- P rating references personnel – the percentage of available strength, the percentage of available military occupational specialty qualified personnel, and percentage of available required senior grade personnel;
- S rating references equipment and supplies on-hand/available – the availability status of critical and mission essential equipment under control of or available to the unit within 72 hours;
- R rating references equipment readiness/serviceability – the operational readiness and serviceability of critical equipment available to the unit within the last 72 hours;

- T rating references unit training proficiency – the ability of the unit to accomplish the tasks on its assigned Mission Essential Task List (METL) and based on that rating report the number of days required to attain full proficiency.

The linkage between the two reports to define readiness is apparent if the data used to determine a facility's C, Q, or F rating adversely impact a unit's P, S, R or T rating, then the facility detracts from readiness and vice versa if the facility positively impacts the same ratings then it contributes to readiness. This linkage obviously requires further explanation, so for example if a unit's facility has a low C rating on the ISR (it's too small for the unit assigned to it) the unit commander may be forced to store their equipment at another facility. The unit then must travel to do maintenance and to obtain that equipment for training, thus degrading its S and R ratings on the CUSR. Other examples are easy to proffer: if a unit cannot conduct necessary training to accomplish it's a task on its METL in the facility in which it's housed, properly indicated on the ISR by a low F rating, the commander must decide if he will use a training day to travel to facility that does support his training plan (wasting one of 39 training days he is allocated per year) or push that training to post mobilization and reporting it as a training day needed to improve his T rating on his CUSR.

These points lead to the appropriate conclusion that the actual linkage between facilities design and readiness is time. You can house a unit in a tent city and they'll figure a way to get ready for their mission, but it will take more time to get them ready for their mission than if they occupied a state of the art facility replete with classrooms, simulators, dehumidifying storage for equipment, maintenance bays and a headquarters

with a fully functional operations center. Our forces are adaptable and innovative, but the amount of time it takes them to be ready for war or a natural disaster is degraded by the quality, quantity and ability of the facility to support the mission. This is directly analogous to the interrelated nature of the ISR and CUSR reports. This truth is self evident to National Guard leaders who've served their entire careers living with workarounds that degrade their readiness by lost time required to simply establish the necessary environment for training at homestation or operations or traveling to a facility that already possesses the environment. Either way, the unit loses valuable training time.

The Requirement

During the Cold War, as a strategic reserve, we were afforded months of post mobilization training in order to be ready to deploy, fight and win. Those days have long since passed. As an operational force we must meet or exceed the standards for readiness we report on the CUSR. When commander's state, as part of their CUSR C rating, that they need a certain number of days to be resourced and trained to undertake their full wartime mission, they must hit that mark. This means that they must maximize pre-mobilization training time. We can no longer accept facilities-based workarounds that negatively impact commander's pre-mobilization training. The first time a battalion-sized unit fails to meet its reported readiness standards on the CUSR during a pre-mobilization ramp for war there will be serious dialogue by the Army, the Department of the Defense, and the Congress as to whether we can maintain our status as an operational force. So, future facilities design must include:

- Sufficient quantity of space (ISR C rating) to provide for unit homestation training and operations, storage and maintenance of equipment;

- Sufficient quality of the facility (ISR Q rating) to provide for the health and well being of the occupying unit and not detract from their ability to use all available training time to meeting their stated pre-mobilization readiness standards;
- Sufficient essential capabilities (ISR F rating) to support the mission of the occupying unit.

The ARNG has proven over the last four years that we can in fact certify and validate a significant amount of required mobilization training during pre-mobilization. The development of the Pre-Mobilization Training Certification and Validation Plan⁹ was done to increase Boots on the Ground (BOG) time of our units. The concept was quite simple in practice. Develop Pre-Mobilization Training and Assistance Teams (PTAE Teams) from within each state to train and validate pre-mobilization tasks prior to arrival at mobilization station, reduce the amount of training time at the mobilization station, and thus increase BOG time in theater. This concept has ended all doubt about whether we can in fact certify and validate a portion of our own training prior to mobilization.

The challenge now is how to maintain this capacity, because by reducing training time at mobilization station we increased training time at homestation. The requirements to certify and validate a unit for war were not reduced. We simply accomplished the missions prior to arriving at mobilization stations. This new method required significantly increased funding, not just for PTAE team operations, but training days for units. Many of those very costly additional pre-mobilization training days were actually used to travel to National Guard Training Centers, Regional State Training Centers and Active Duty Installations to accomplish their tasks prior to mobilization, that in many cases could be

accomplished at homestation if readiness centers were designed with readiness and training in mind. Funding will certainly be reduced and therein lies the potential for the PTAE teams to go away and with them the additional training days allocated to units in order to meet pre-mobilization standards and timelines.

It is highly unlikely that current standard procedures of providing additional resources will go away after a unit is alerted. However, it is likely that additional resources will go away before alert and potentially after sourcing and before alert. This is further evidence that units must maximize training and can no longer simply accept facilities based workarounds, which impact training time and thus readiness.

Senior ARNG leaders have always pushed to maximize training time and eliminate the “wall sucking” of soldiers standing around waiting on meaningful training to occur. The difference in today’s environment is that we are now and operational force and cannot accept lost training time or we risk backsliding into our former role. Unit commanders will have to squeeze every minute of every training day in order to appropriately use all available time to be ready.

We cannot assume that additional training days will be funded to conduct mandatory pre-mobilization training that we failed to accomplish, nor can we assume that there will be time post-mobilization to make up training deficiencies. Commanders reporting T rating on the CUSR must include an accurate assessment of training days needed and the commander must hit that mark. They cannot fail in this task as commanders of operational reserve forces. This is where appropriately designed facilities could actually enhance unit readiness. Facilities designed to allow unit commanders to conduct training at homestation reduces travel time, reduces

workarounds, reduces risks associated with travel and increases days available to the commander to be ready to conduct their wartime mission.

The way to accomplish this mission is to forget the old ways of doing business. We cannot build facilities for a certain unit or type of unit as we did fifty years ago. We cannot build facilities for a certain official in his district or county because of their need or desire for a home town unit. We cannot continue to build facilities in a geographically distributed isolated fashion. We cannot build facilities based solely on having a recruiting presence in a locality. We cannot build facilities consisting of just a few offices, a drill hall floor, an arms room, supply cages, latrines and a gravel motorpool. We cannot build facilities based on the square footage generated by an algorithm in a computer system (Real Property Planning and Analysis System (RPLANS)).

We must think creatively and have a strategic mindset in order to solve this problem in the current environment and because the solutions will manifest over decades. New ways of thinking will manifest in new ways of doing business. We must build facilities based on an echelon or a size of unit. We should use a modular national template to reduce design costs. We must build facilities outside of urban areas on sufficient enough land to allow commanders to do limited homestation individual and crew/squad collective training. We must consider these new facilities, centers of readiness, meaning they have the capacity to generate and contribute to the readiness of the occupying unit. We must build these facilities near interstates and, if possible, airports. We must build these facilities in a modular fashion that reduces assembly and deployment time from homestation. We must build these facilities to incorporate emerging technologies. We must build these new facilities with readiness in mind.

Building a facility for an echelon of command has many advantages for readiness. The battalion commander, in most cases, is the first level of leader to report his CUSR to higher headquarters and have it rolled up to the NCA. The commander controls unit readiness at the appropriate level and they have a staff that is capable of training company leaders and platoons of soldiers at homestation. The battalion commander can allocate resources in order to manage training at that level. They should have a facility that meets those needs.

Facilities built on land outside urban areas, but within commuting distance of them, will no longer detract from readiness. Commanders will not spend precious time concerned with events within that urban area that impact the safety and operations of their unit. Many urban facilities cannot fulfill Anti-Terror or Force Protection requirements. These units find themselves without parking and impacted by a myriad of issues associated with being downtown in urban environments. Other units find themselves in exceedingly rural environments that suffer from isolation.

Some critics of this recommendation will site adverse impacts to recruiting and retention. While they might have a point, the risk to falling back into a strategic reserve role because we cannot meet readiness standards is a greater risk to the force. If implementation of this recommendation does impact recruiting and retention it can easily be mitigated with more store front operations in more populated urban areas across a unit's region.

Current stationing issues are simply associated with post World War II planning that stationed armories in what were appropriate areas at that time. Many armories are no longer appropriately stationed. In order to remedy this and to insure we fix it now and

for generations to come, we should build readiness centers for battalion sized elements on survivable land, near lines of communication, within commuting distance of major metropolitan areas and give that battalion a regional support role for DSCA that are in the same region they covered when they had a company/battery/detachment in small towns all over the same.

We must also consider the terrain when building new facilities, as many of our facilities across the country are not built on survivable ground. Examples are easy here: when the town floods the readiness center floods or when the earth shakes the readiness center falls down. Studies done by the Army Corps of Engineers should be considered when choosing new building sites. Survivable armories in the Cold War meant a bomb shelter in the basement. Survivable readiness centers today means they're a place the local government can rally when the town floods, because the new centers of readiness were built on high ground.

As previously stated, "readiness center" is just another term for armory and usually manifests itself in an updated facility that is nothing more than a remodeled armory. We must endeavor to build centers of readiness. Our centers of readiness must have the capacity to generate readiness and incorporate the support functions to make it so. They must have design features that allow units to conduct required pre-mobilization training, which are predominantly warrior tasks and drills at home station.¹⁰ This is easily done by building facilities with enough land, classrooms, and simulators to allow leaders to conduct training on the premises. The land requirement here is small, less than 20 acres for an entire battalion center of readiness. It is almost criminal to require a unit to exist in a building down town with a parking lot outside and no place to

train their force that requires soldiers to travel every drill or nearly every drill in order to obtain training required to keep them ready. That travel reduces training time and increases risk to the unit and its personnel as they must convoy to an appropriate training location for sometimes the simplest of tasks. Training simulators that allow units to conduct appropriate individual and crew training at homestation should be incorporated into facilities design. Computer labs, which could be easily used for distance learning, a battalion operations center, or an administrative computer lab to allow soldiers to conduct the growing list of online tasks should be present.

Modular facilities are a concept that simply fits the force. Battalions are composed of company/battery sized units and platoons. That will not change any time soon and as such we should build the facility with that in mind. Simply include:

- A battalion headquarters containing appropriate offices and a computer lab. The lab would double as a distance learning classroom, place to conduct administrative online tasks, and an operations center;
- Six company areas with offices, latrines, and a drill hall floor;
- A multi-use training facility, nothing more than a drill hall floor with classrooms, simulators and a fitness room along its perimeter;
- Maintenance facility to allow for a minimum of 20% of the units equipment to be on hand, out of the elements and -20 level maintenance to be performed indoors; with a paved motorpool to store the remainder of the unit's vehicles;
- Supply rooms, signal vaults, arms rooms and weapons vaults should be in mobile containers that are designed to meet security requirements and simply connect to the battalion and company buildings through ports in the wall,

allowing units to simply load on to a truck and haul away for training or mobilization. Containerized storage also allows for increasing storage and floor space without remodeling the building.¹¹

The solutions proffered above are modular because a battalion is a battalion and a company is a company in the design. Across the force, battalions are organized with a headquarters and one to six subordinate companies, so building for a size of a unit, not a type of unit makes sense. State level or brigade level leaders could decide how to fill company areas within these centers of readiness for battalions that are not organized with six subordinate companies. The battalion would have training and administrative oversight of every company within their center of readiness, with the goal for that battalion to actually be task organized with the forces stationed with it. The training benefit to the companies is the goal. They would have support from the battalion staff, facilities conducive to training and maintenance, support from peers and redundant capabilities at homestation. The above recommendations would fit a force in 1950, fits a force today and should logically fit a force for tomorrow.

Looking Towards the Future

Building facilities with emerging technology in mind means two things: incorporate space for information technology closets and infrastructure so that units don't lose valuable storage space to hub rooms and build renewable energy into the facility to reduce utilities costs. There are other cost savings here other than those associated with renewable energy. Fewer facilities across a state reduce the amount of infrastructure and maintenance support required.

All of the factors above would have a positive effect on Defense Support to Civil Authorities (DSCA) and were recommended because of it. Examples here are easy as well:

- Battalion headquarters on survivable ground becomes the mayor or county judge executives place of business when their offices have been rendered unusable by natural disaster;
- Computer labs that double as a battalion operations center become the emergency management operations center when a natural disaster strikes;
- Maintenance facilities that allow for 20% of a units equipment to be stored indoors allows for units to keep vehicles out of the winter weather and fully mission capable to respond at a moment's notice during winter storms;
- Company drill hall floors aggregated in a battalion area become shelters for displaced persons due to natural disasters and/or barracks for soldiers in the same incident. A battalion may be able to house their own soldiers in 3 of the 6 company drill halls and open the other 3 drill halls to civilians for shelter;
- The multi-use training facility could become a medical center or cafeteria;
- Redundant company offices become command posts when others are rendered unusable by disaster or offices for local officials if the companies are forward deployed into the affected area;
- Land outside the urban area, but near an interstate and/or an airport not only allows a unit to be more easily deployed, it allows the battalion area to be easily turned into a point of distribution for food, water and supplies to residents affected by a natural disaster.

The concept of the battalion centers of readiness doesn't take away the requirement for engagement of local leaders and planning for disasters. The loss of an armory within a municipality is not the loss of support to that local mayor or county judge executive. The unit still retains the requirement to engage and influence local leaders and to conduct plans and exercises with them to prepare for local and regional emergencies.

The cost of these changes will impact each state and territory differently of course. Some states, like Oklahoma, have already begun to incorporate and build readiness into their facilities designs and overall installation management plans. The state leadership and facilities experts in Oklahoma logically deduced that the antiquated Cold War facilities did not match the new role of an operational force.¹² Other states and territories are struggling to find the solution to the fissure between and operational force and Cold War strategic reserve type facilities. All could pay for it by selling current facilities and the land they are built on to local developers or municipalities to come up with state matching funds, while continuing to work with National Guard Bureau for the federal funds to recapitalize their worst facilities.

The recommendations above do not constitute a large increase in facilities quantity overall. The state or territory would not see a net increase in facilities (number of buildings), but they should see an increase in square footage to bring them up to their required amount only. Another way to help fund these recommendations would be to build offices in the battalion headquarters specifically for interagency partners: state/territory department of emergency management, state police, and department of agriculture or forestry just to name a few. Some or all of the agencies a unit would

welcome into their headquarters could assist with building and maintenance costs. This concept would also facilitate greater cooperation during DSCA operations. Additionally, incorporating cutting edge renewable energy technology into designs would not only meet mandated future requirements by Presidential Order 13514¹³, but would reduce the utility costs for decades to come.

The other realized cost savings is reducing the required number of additional pre-mobilization training and readiness days. Building readiness into a facility helps a commander meet pre-mobilization training requirements without the need for additional days of training. Additional training days needed to mobilize and deploy is where the real cost of inadequate facilities resides. Manpower is the most expensive portion of the Army budget. We proved our ability to train to pre-mobilization standard as discussed above, but did so with additional Overseas Contingency Operations (OCO) funds to pay for the additional days needed to make it happen. So, it can be deduced that inadequate facilities that adversely impact the P, S, R and/or T ratings and thus overall the C rating on the CUSR manifest themselves in increased manpower costs during pre-mobilization training and readiness operations. Just one additional day's training or maintenance needed pre-mobilization for a one hundred soldier unit, organized with a company headquarters, and three platoons costs an estimated \$22,000 dollars.¹⁴ If you do the same estimate for a medium sized battalion of six hundred soldiers organized into five companies and a battalion headquarters the estimated cost is \$132,000 per lost training day. Lost training days accumulate quickly when a unit is required to travel to a training center in order to conduct training that could have been done at homestation.

The general recommendation is to build facilities that support training of individual and crew/squad collective tasks at homestation. Further, to incorporate proper storage and maintenance facilities to insure units are able to train with their own equipment and that equipment is kept fully mission capable to the greatest extent possible. Also, to build into the battalion centers of readiness certain facilities capacities that support METL task accomplishment at homestation, thus positively influencing the C rating on the CUSR, by not specifically reducing the P, S, R, and/or T rating on the same. The other important note here is that the recommendations made here also support DSCA in their entirety. The general template for a recommended solution to build readiness into facilities design is:

- Consolidate units regionally;
- Build for centers of readiness based on battalion sized elements;
- Build outside urban areas;
- Build near interstate highways, airports or other lines of communication;
- Build on survivable ground;
- Build physical fitness training and testing facilities on site;
- Consolidate information technology infrastructure;
- Incorporate mobile containers for supply rooms, storage and vaults;
- Build maintenance bays for 20% of a motorized battalion's equipment;
- Build paved motorpools for the remainder of a motorized battalions; equipment,
- Incorporate AT/FP into the design;
- Include training simulations facilities to allow for homestation training;

- Include multiple classrooms;
- Include information technology storage and wiring into the design;
- Include a computer lab that could also serve as an operations center;
- Leave enough open ground outside the facility for training;
- Incorporate renewable energy into the building design;
- Consider interagency and first responder tenants that assist with construction and maintenance costs.

Conclusion

Facility design affects readiness. One only needs to drill down into the ISR and CUSR to see the connectivity and determine the currency of readiness in the context of facilities is time. If the underlying causes used to determine a facility's C, Q, or F rating on the ISR adversely impacts a unit's P, S, R or T rating on the CUSR, then the facility detracts from readiness. By identifying this impact, we can then see that it is possible to build facilities that actually contribute to readiness. Units occupying the most austere facilities as their homestation readiness centers can still overcome shortfalls in their training and resourcing, but they must adapt and overcome. The ARNG has proven to be adaptable and innovative, but the amount of time it takes a force unit to adapt and overcome shortfalls and workarounds and then be ready for war or a natural disaster is degraded by the quality, quantity, and ability of the facility to support the mission.

The Cold War and the days of being a strategic reserve have long since passed us by. As an operational force it is absolutely imperative that commanders meet or exceed the standards for readiness they report on the CUSR. The fact that we report our own standards on the CUSR and we will be expected to meet them is the center of

gravity in our future ability to maintain our status as an operational reserve. When commanders state, as part of their CUSR C rating, that they need a certain number of days to be resourced and trained to undertake their full wartime mission, they must hit that mark. This means that they must maximize pre-mobilization training time. In support of every commander in the operational force, our senior leaders can no longer accept facilities-based workarounds that negatively impact their subordinate commander's training. The first time a battalion-sized unit fails to meet its reported readiness standards on the CUSR during a pre-mobilization ramp for war there will be serious consequences for the entire ARNG. This strategic imperative in readiness, when coupled with the fact that a large portion of our facilities have met or are about to meet their DoD defined end of life cycle, means that we must plan now to build facilities that serve an operational force and design them to contribute to readiness.

Endnotes

¹ National Defense Authorization Act for Fiscal Year 2011, Report 111-201, 111th Congress 2d Session, printed and filed under the authority of the Senate of May 28, (legislative day, May 26) 2010, 258-259.

² Managing the Reserve Components as an Operational Force, *DoDD 1200.17, October 28, 2009, 1-2.*

³ OSD-RA Brief, Facility Program, ARNG-ILI, COL Richard Nord, 16 December 2011.

⁴ The Impact on Readiness of Army Reserve Component Facilities, COL Richard Nord, PRP USAWC, 11 May 2009, 16-17.

⁵ National Defense Authorization Act for Fiscal Year 2011, Report 111-201, 111th Congress 2d Session, printed and filed under the authority of the Senate of May 28, (legislative day, May 26) 2010, 258-259.

⁶ *ibid*

⁷ The Impact on Readiness of Army Reserve Component Facilities, COL Richard Nord, PRP USAWC, 11 May 2009, 16-17.

⁸ DA Pam 220-1, Defense Readiness Reporting System - Army Procedures, Headquarters Department of the Army, Washington DC, 16 November 2011

⁹ Pre-Mobilization Training Certification and Validation Plan, NGB Plan-Ord 18, 19 July 2007, LTG Clyde Vaughn, COL Timothy J. Kadavy

¹⁰ Soldiers Manual of Common Tasks, STP 21-1-SMCT, Headquarters Department of the Army, Washington DC, 18 June 2009.

¹¹ Author's note: this idea has been attributed for many years to MG John "Russ" Groves, TAG-KY. It is rumored to have been the subject of his SRP many years ago and I am trying to find it. However, he did not attend USAWC, but another war college and he is deceased.

¹² The Adjutant General (TAG) Narrative for Real Property Development Plan 2011, NGOK-TAG, Oklahoma City, OK, 15 March 2011.

¹³ Executive Order 13514 – Federal Leadership in Environmental, Energy and Economic Performance, Federal Register Part VII, October 8, 2009

¹⁴ Appendix 1 (TY12 Budget Spreadsheet) to Annex C (Operations) to FRAGO 31 to OPORD 11-01, Kentucky Army National Guard

