STRATEGY RESEARCH PROJECT

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ARMY TRANSFORMATION: ARE INSTALLATIONS READY?

BY

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USAWC STRATEGY RESEARCH PROJECT

Army Transformation: Are Installations Ready?

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ABSTRACT

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The Army is well on its way toward developing the first phase of its Army After Next. It has completed the force structure, manning and training of its first Interim Brigade Combat Team (IBCT) and is well into realizing the second IBCT. It appears that the Interim Force will be a reality by 2010 as envisioned by the Chief of Staff of the Army (CSA), General Eric Shinseki. The Transformation to the Objective Force by 2032 appeared to be on track before 11 September 2001. Is the Army paying equal attention to the infrastructure that will be asked to house, feed, deploy and redeploy the lighter, more agile, lethal, and technologically superior forces of the future? This paper examines what the Army can or should do to ensure Army installations are on track with and in concert with the CSA's Transformation Campaign. The paper will delve into whether or not installations will be able to support the Objective Force deployment requirements. Questions that will be considered include: Is there a vision for the ideal force projection platform for the of the 21st Century? If so, what is being done to transform the installations to meet that vision? Do the means to support the Objective Force already exist? What are the risks in staying with the status quo? Are installations being modernized in sync with transforming the force?

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LIST OF ILLUSTRATIONS

ARMY TRANSFORMATION: ARE INSTALLATIONS READY?

In August 1995, the United States Army, Europe (USAREUR) directed the Commanding General, 21st Theater Army Area Command (TAACOM)[1] to begin planning for the possible deployment of the 1st Armored Division (1AD) to Bosnia-Herzegovina. The 1st AD was to be the main ground element of the American military contribution to any action resulting from the Dayton Peace Accords. OPERATION JOINT ENDEAVOR—the NATO-led force that was also known as the Implementation Force (IFOR)—became the largest and most complex overland deployment of U.S. Forces in the European Theater since World War II.

What began as a pro forma planning meeting among logisticians from USAREUR, 21st TAACOM, Fifth U.S. Corps' 3d Support Command and 1AD soon proved to be a daunting task for everyone involved. No one in USAREUR could remember the last time an entire American division and its supporting elements were deployed overland through Europe. To add to the problem, the deployment would entail moving through former Warsaw Pact countries. This new planning made it seem impossible to grasp solutions to simple questions involving land routes, modes of transportation, border clearances, ground and rail nodes, and route security. By mid-September 1995, it was clear that the planners had to quickly learn some hard lessons.

Four months later, the United States successfully deployed over 25,000 soldiers and their equipment from Germany to Bosnia-Herzegovina on the exact date and time required by the Dayton Peace Accords and the President of the United States. It appeared on the surface as another successful deployment mission by USAREUR's men and women. However, in the midst of the thousands of hours spent in hundreds of Functional Area Analyses (FAA) and simulated war games, a grim discovery was made: some Army installations in Europe were ill-prepared or equipped to handle the forward projection of USAREUR forces. What for some should have been a simple deployment exercise became a nightmare of trials and errors. Deployment-related inadequacies in many of the USAREUR installations were discovered. Among these shortfalls were:

- aging or inappropriate deployment node facilities.
- installation and unit personnel unprepared for deployment node operations.
- lack of training in rear detachment and family support group procedures.
- inadequate pre-deployment processing procedures for soldiers and civilian employees (now called Soldier Readiness Processing).
- non-existent or outdated Host Nation support arrangements.
- inefficient communication between deploying units and installation commanders.

To be fair, as commanders and leaders identified these and other shortfalls they immediately did everything to correct them. Strong and energetic leadership combined with much "innovation on the run" had a lot to do with the success of this particular deployment.

For decades, the emphasis among Europe-based installation commanders was to get ready to receive forces from CONUS. During the Cold War the U. S. European Command (USEUCOM) and our NATO Allies used the annual Return of Forces to Germany (REFORGER) exercise to train and validate the United States' ability to project forces to the European continent. The robust NATO forces stationed in Europe were designed to deter and, if necessary, defeat a Soviet attack on Western Europe. The U.S. Forces Korea (USFK) has continued to conduct its annual joint and combined exercises (e.g., EXERCISE ULCHI FOCUS LENS and EXERCISE FOAL EAGLE) to practice receiving reinforcements. It is not surprising therefore that bases in Europe and Korea were historically adept at receiving forces rather than deploying forces.

The deployment of the VII Corps to Operation Desert Shield/Storm (ODS) in Southwest Asia in 1990 and early 1991 was a culture shock for many USEUCOM planners and operators. Base commanders who owned Seaports of Debarkation (SPOD), railheads and barge ports had to learn the reverse of what they were so expert in...the opposite of REFORGER, so to speak. Logistics and transportation management systems were pushed to the breaking point by the sheer size and complexity of the deployment. In the end, the deployment was successful despite the initial confusion among base commanders who had been trained to receive forces, not to deploy them. In ODS there was time to learn as the operation continued. That luxury was not present during OPERATION JOINT ENDEAVOR.

USEUCOM was called upon to deploy forces from Germany when the Dayton Peace Accords were finalized in December 1995. This time more than 25,000 soldiers from the 1st Armored Division (1AD) and other units throughout the Army were to be deployed to Bosnia-Herzegovina as part of NATO's Implementation Force (IFOR). The mission of receiving, staging, onward movement, and integration (RSOI) of ground forces was given to the Army Component Commander, CG, USAREUR. In turn, the CG, 21st Theater Army Area Commander (TAACOM) was designated as the USAREUR Executive Agent for the deployment and redeployment of U.S. ground forces to the Balkans. Despite the lessons learned in the 1990-91 deployment of forces to ODS, USAREUR still did not have centralized control and coordination of its installation actions during deployments and redeployments. To solve this, USAREUR placed its installations under 21st TAACOM's operational control (OPCON) to instill order, standardize procedures, and orchestrate installation support actions. This immediately

improved coordination of unit movements to the staging and deployment areas and onward to the IFOR intermediate staging base at Taszar, Hungary.[2]

Since IFOR's deployment and the subsequent deployments of Task Force Hawk and Task Force Falcon to Kosovo, the Army in general and USAREUR in particular have learned a great deal about how installations should be readied to support deployments and redeployments. Typical of Army ingenuity, leaders focused on solving operational problems as they arose—that is, reactive problem solving. Do those lessons apply today? Are new ideas needed to ensure installations can support how the Objective Force will deploy and fight in the future? In other words, are installations in sync with Army Transformation?

The purpose of this paper is to propose how the maintenance and modernization of Army Installations must be synchronized with all the other actions outlined in the Army Transformation Campaign Plan. The paper will posit that the Army must balance the transformation of its installations and forces in much the same way one wields the reins to a team of powerful horses. That is, steering the team to arrive together at a destination requires the driver to maintain even pressure on the reins. This paper examines the recent history and current status of installation readiness, explains current initiatives for improvement and, finally, suggests areas for future focus.

FORCE PROJECTION AND THE INSTALLATION

THE BASICS

Installations continue to play a key role in the Army's force projection capability. Installations exist to house, sustain, train, and project the force.[3] Projecting the force involves mobilization, deployment, redeployment, and demobilization (MDRD) of forces. The installations that support MDRD must be seen as force projection platforms. Designated force projection platforms are to efficiently process brigade-sized units or larger.[4] Overseas, installations are generally treated as supporting projection platforms that feed into a designated APOE/SPOE or staging area. In 1998, for example, U. S. Army, Europe (USAREUR) began operating a Deployment Processing Center (DPC) at Rhine Ordnance Barracks in Kaiserslautern, Germany, to support the deployment of Air Defense Artillery units to Kosovo. In 1999, the DPC supported the deployment of V Corps units to Task Force Falcon and Task Force Hawk. The DPC operation was such a success that USAREUR invested heavily in its modernization and officially opened it on 25 May 2001.[5] All Germany-based forces deploying to an Area of Operations (AO) now pass through the USAREUR DPC. Forces flowing from CONUS through Germany also

flow through the DPC. In contrast, installations in Korea are still primarily designed to receive forces as opposed to projecting forces.[6]

As of June 2001, the Army has designated fifteen CONUS installations as "force projection platforms" and twelve "supporting projection platforms":

PROJECTION PLATFORMS		SUPPORTING PROJECTION PLATFORMS	
INSTALLATION	MACOM	INSTALLATIOIN	MACOM
Fort Benning, GA	TRADOC	Aberdeen PG, MD	AMC
Fort Bliss, TX	TRADOC	Camp Atterbury, IN	NGB
Fort Bragg, NC	FORSCOM	Camp Shelby, MS	NGB
Fort Campbell, KY	FORSCOM	Camp Roberts, CA	NGB
Fort Carson, CO	FORSCOM	Fort Buchanan, PR	USARSO
Fort Dix, NJ	USARC	Fort Huachuca, AZ	TRADOC
Fort Drum, NY	FORSCOM	Fort Jackson, SC	TRADOC
Fort Eustis, VA	TRADOC	Fort Knox, KY	TRADOC
Fort Hood, TX	FORSCOM	Fort Lee, VA	TRADOC
Fort McCoy, WI	USARC	Fort Leonard Wood, MO	TRADOC
Fort Lewis, WA	FORSCOM	Fort Rucker, AL	TRADOC
Fort Polk, LA	FORSCOM	Gowen Field, ID	NGB
Fort Riley, KS	FORSCOM		
Fort Sill, OK	TRADOC		
Fort Stewart, GA	FORSCOM		

FIGURE 1: (U) CONUS FORCE PROJECTION PLATFORMS[7]

Each force projection platform must provide robust facilities to deliver life support to transiting units. These power projection platforms must be large enough and capable of supporting the complex RSOI tasks of arrival, off-load, up-load, staging, supply distribution, assembly, pre-deployment training and life support.[8]

Life support facilities include soldier processing centers, lodging, training areas, railheads, bus terminals, equipment and personnel staging areas, and access to air terminals, waterways, and seaports.[9] Obviously, different installations require different capabilities depending on their place and mission within the force movement flow. Some installations may require nothing more than a small staging area where troops will be picked up for onward movement to larger staging areas (sometimes referred to as an Intermediate Staging Base (ISB)) or assembly areas for ultimate movement to an assigned departure airfield (APOE) or seaport of embarkation (SPOE). Installations such as Fort Bragg or Fort Hood require greater capabilities due to the size and type of formations they are called upon to deploy.

BEYOND THE BASICS

In a December 2001 point paper, Thomas Sweeney, a professor at the U. S. Army War College Center for Strategic Leadership, wrote:

> Over the last decade, the Army invested heavily in infrastructure improvements to develop "Power Projection Platforms." This was done principally through the Army Strategic Mobility Program (ASMP). These efforts were focused on the heavy forces and the time lines laid out in the post-Desert Storm era. While these efforts have been extremely beneficial to the responsiveness of Army forces in crises, they may require some significant re-examination and "fine-tuning" to match the current deployment guidelines. As we field the IBCTs (Interim Brigade Combat Team) and the Objective Force Brigades, we should also consider infrastructure and stationing enhancements to make sure our investment in units and material is matched by a responsive and supportive installation structure.[10]

To put these questions and Mr. Sweeney's conjecture into context, one must first examine how Army Transformation contributes to achieving the goals outlined in Joint Vision 2020.[11]

THE JOINT VISION

Transformation of our Nation's military is a key component in the 2001 Quadrennial Defense Review (QDR). The QDR validates the guidance contained in *Joint Vision 2020* and confirms military Transformation as a matter of Defense policy. Further, the QDR directs that "appropriate resources" be committed toward attaining the transformation goals outlined by the Chairman of the Joint Chiefs of Staff (CJCS) in 1999:

> Transformation is at the heart of this new strategic approach. The Department's leadership recognizes that continuing 'business as usual' within the Department is not a viable option given the new strategic era and the internal and external challenges facing the U.S. military...Without transformation, the military will not be prepared to meet emerging challenges.[12]

On 27 November 2001, Secretary of Defense (SecDef) Rumsfeld announced that retired Navy Vice Admiral Arthur Cebrowski would be the Director for Force Transformation. In so doing, the SecDef sent an unmistakable message that military transformation would be a joint service effort coordinated at the highest level within the Department.[13] President Bush, in his speech at the Citadel on 11 December 2001, further emphasized that military transformation is a top priority in light of the 11 September 2001 terrorist attacks.[14]

Fortunately, the Armed Services had enthusiastically embraced transformation and willingly invested resources toward their respective transformation efforts long before 2001 QDR was published. The Army began developing its future vision even before Joint Vision 2020 was released:

> Since 1996, a series of broadly based studies by the Army After Next [now called the "Objective Force"] Project has identified issues vital to the Army, in particular, and joint forces, in general. These studies build upon Army XXI, which embodies

new and radically different concepts about the Army's look, feel, and capability in the first decade of the next century. Just as Army XXI is compatible with the four pillars of Joint Vision 2010—dominant maneuver, precision engagement, focused logistics, and full dimensional protection—so too will the Army After Next. In fact, [the Objective Force] adds to the cultural changes inherent in Army XXI...and becomes the basis for articulating the Army's speed and agility requirements and capabilities twenty-five years and beyond into the future.[15]

At least for the time being the Armed Services will have to pattern each of their respective transformation efforts according to the template set out in Joint Vision 2020. The Joint Forces Command's version of the Joint Vision Template is shown at Figure 2.

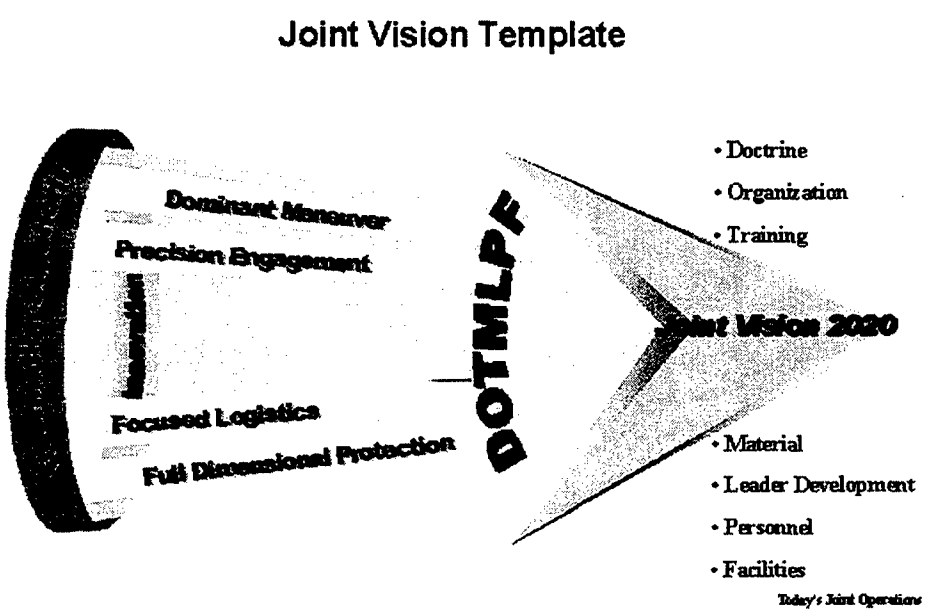

FIGURE 2: JOINT VISION TEMPLATE[16]

THE ARMY VISION

In 1999, General Eric Shinseki, the Chief of Staff of the Army (CSA), launched the latest Army Transformation Campaign. The CSA aims to shape the United States Army into the Objective Force—an Army that is responsive, deployable, agile, versatile, survivable, and sustainable. The CSA sees the Objective Force as being able to leverage America's technological superiority and industrial might.[17] The goal is to field the Objective Force by 2032. The Transformation Campaign plan for reaching the goal is a three-pronged approach. On one axis, the Army plans the limited modernization and recapitalization of existing forces and

weapons systems or the Legacy Force. This will retain current capabilities to conduct a possible Major Theater War or selected small-scale contingencies. To bridge the gap between the Legacy Force and the Objective Force, the Army is building an Interim Force that is designed to be as lethal but lighter, more agile than the Legacy Force. The third and critical path toward the realization of the transformation uses emerging science and technology to re-shape units, doctrine and infrastructure to ensure the Objective Force is capable of full spectrum dominance over any enemy, under all circumstances. Figure 3 outlines the characteristics of the Objective Force.

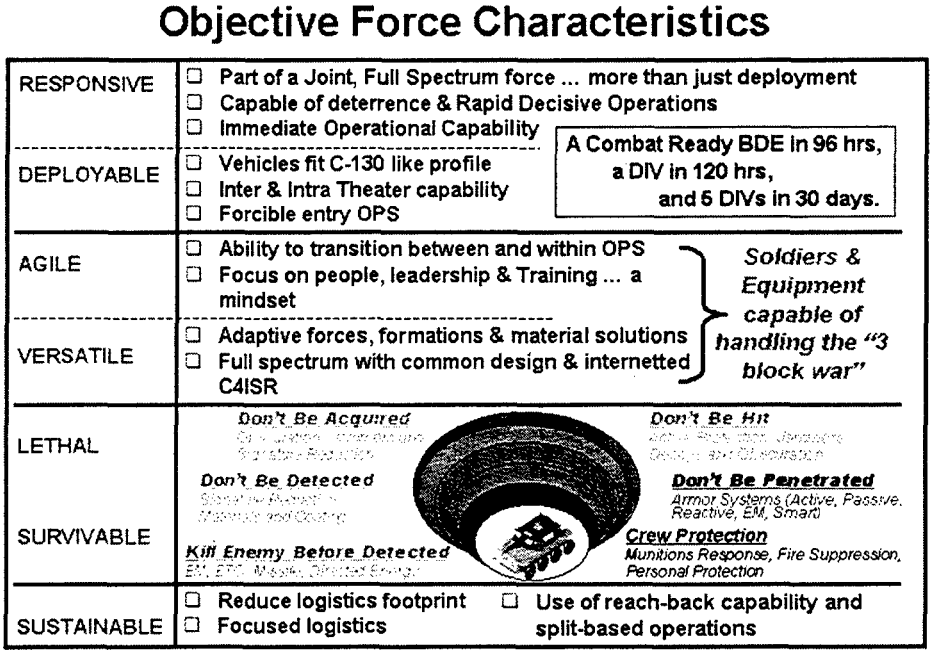

FIGURE 3: OBJECTIVE FORCE CHARACTERISTICS[18]

The United States Army Posture Statement FY01 states "transformation will require careful planning, sustained support [by Army Leaders, Congress, and future Administrations], periodic assessments and adjustments. To do this, the Army "will pursue a conditions-based strategy [to] ensure appropriate conditions are met before implementing subsequent decisions."[19] It is logical to conclude that the Army must also transform the support structure (e.g., installations) that will make the Objective Force as effective and relevant as the CSA envisions.

THE ARMY MODERNIZATION PLAN

It is important to examine the Army's formal approach toward achieving the goals of its Transformation Campaign Plan. The Army Modernization Plan (AMP) contains the specific

principles and direction upon which the transformation is to be conducted. The AMP's primary objective is to "focus on building combat-capable units to support the Transformation of the Army and ultimately to ensure the world's preeminent ground force maintains its capability to fight and win the Nation's wars."[20]

The AMP points the way toward making the Objective Force a reality by 2032. Also, the AMP is effectively linked to the1997 National Security Strategy and the National Military Strategy. The AMP is rigorously tied to the operational concepts found in *Joint Vision 2020.* The plan also reflects a thorough assessment of near-, mid-, and long-term threats, required responding capabilities, and the risks associated with the decisions of when and what to modernize.

However, the Army Modernization Plan does not:

- lay out specific details on all Research and Development activities.
- specifically commit to budget forecasts beyond FY02.
- reflect specific modernization schedules for units.
- **address installations, training, and leader development programs related to modernization.**

The AMP effectively articulates the methodology of the transition from the Legacy Force, to the Interim Force, and ultimately to the Objective Force. It is particularly strong in tying the development of future operational capabilities in a joint context. Since the AMP preceded the 2001 Quadrennial Defense Review (QDR) by almost two years, the Army must now adjust the AMP to support the change from a threat-based strategic planning template to a capabilities-based National Military Strategy.[21]

In light of recent events, the AMP also needs to be reviewed in these areas:

First, efforts to field the Interim Force at an accelerated pace must include strengthening or building new units uniquely capable of dealing with or applying asymmetric warfare tactics.

Second, the AMP says nothing about the modernization of physical and institutional infrastructure, leaving one to presume it is implied in the re-capitalization of the Legacy Force. This particular omission weakens the AMP. Some would argue that if the Army does not explicitly address installation modernization in the AMP, installation modernization would be relegated to a much lower priority for receiving adequate funding. However, facilities for training and housing the new Interim Brigade Combat Teams (IBCTs) are being acquired and modernized. Retired Army Colonel Richard Dunn III, a senior analyst at the Strategic Assessment Center, states, "the failure of the Army's last effort to transform was due to a

strategic failure—the failure to simultaneously transform the institution that had to produce the transformed force."[22] For example, the Army must also modernize its Base Operations (BASOPS) program while it is fielding its Interim Force to assure a functionally integrated transition to the Objective Force. It is paramount that the Army gives the issue of installation modernization the same emphasis it gives to re-tooling its fighting forces.

Third, the issue of homeland security is now a major factor that can cause the Army to shift or temporarily suspend portions of the transformation. Since 11 September 2001, the planning factors for Army modernization have changed dramatically.

> Homeland Security requirements are literally flooding into the Department of Defense (DoD). Appropriate or not, a plethora of requests for "non-warfighting" support have arrived at DoD and the Department of the Army. These requirements cover a wide range of issues such as border security for the continental United States, airport security, and security for nuclear power plants, to name just a few. The Secretary of the Army has been designated by the SecDef to be the DoD's Interim Executive Agent for Homeland Defense. This has caused Army operational and modernization planners to take stock.[23]

Unquestionably, the attention that the Nation is correctly paying to Homeland Security will affect installation modernization in a variety of ways. One of the immediate impacts is the depletion or diversion of already limited funds earmarked for installation sustainment. On the other hand, homeland security issues may trigger a dramatic increase in the availability of force protection funding. This increase could become a source for modernization of our installations by way of improving force protection capabilities in Army installations. At this point, nothing final has been decided about the military's role in homeland security.

What will the future Army Installation look like? What facilities and services need to be in place for the Objective Force to be as effective as it can be? The answers to these questions are not obvious in the AMP. As recently as the spring of 2001, some officials from the Army's Assistant Chief of Staff for Installation Management (ACSIM) recognized that:

> Some of the Army's physical infrastructure (e.g., motor pools, barracks, family housing, administrative buildings, training facilities) dates back to early 1950's. Overseas bases have pre-World War II structures and utilities infrastructures. Yet, the Army has chosen to delay much of the necessary improvements for many of its bases in favor of funding the Transformation. Since 1999, funding for base infrastructure have been spent to try to keep structures, roads, and grounds from getting any worse as opposed to rebuilding or replacing them...projected funding levels for maintenance of Repair and Maintenance Program (RMP) will be held to 30% in the next two years.[24]

Surprisingly, the AMP is not specific about the modernization and redesign of Army facilities. The AMP focuses on modernizing equipment and organizational structures.

Transformation is visible as it manifests itself in procurement of new lightweight fighting vehicles, development of new doctrine, experimentation of emerging technology, and 100% staffing of the IBCT and combat divisions of the Legacy Force. Continuing the investments that are required for the Army's sustaining base—what some call the sub-surface of the Army—is also necessary. Further, installation modernization must be *synchronized* with other actions associated with the development of the Objective Force. It is imperative that the AMP identifies the processes and resources required to keep installation readiness at the forefront during resource planning processes such as the Total Army Analysis (TAA).

The importance of keeping installation planning factors synchronized arose during the fielding of the first IBCT at Fort Lewis, Washington, in 1999-2000:

> Fort Lewis did not publish an integrated facilities transition plan that adjusted assignment of support facilities such as motor pools, barracks, and health facilities to support the brigade transformation. This caused significant challenges at the unit level. As units reorganized and new units were activated the brigade footprint began to span the entire post. As a result, troop units became separated by quite a distance from their assigned support facilities and inherited significant command control challenges.[25]

Another example surfaced when, "after months of excruciating work, those involved in cranking up the first IBCT realized they had completely overlooked the requirement to prepare an Environmental Impact Statement. This federally-mandated requirement has a 2-year completion cycle and, therefore, should have been made a major driver for the [IBCT fielding] timeline. It was not and it became contentious. The point here is that actions need to be synchronized because installation limitations or capabilities can constrain or shape the transformation effort."[26] On the other hand, Fort Lewis was the beneficiary of a more streamlined equipment turn-in process in which many bureaucratic steps had been waived.[27] This is a good example of how synchronizing actions across the board to simultaneously fix age-old, neglected problems posture installations to successfully support the 21st Century Army.

The Army must pay equal attention to its power projection and force retrieval capabilities that are supposedly imbedded in its facilities. This is true for installations both in the continental United States (CONUS) as well as overseas. The CONUS installations' ability to project power and receive returning forces effectively has been a major reason the Army has succeeded in post-Cold War operations from DESERT SHIELD/STORM in Southwest Asia to ENDURING FREEDOM in Afghanistan. By comparison, Europe-based installations lag in force projection capabilities due mainly to funding shortfalls, deteriorating infrastructure, and complex

host nation requirements regarding the maintenance of facilities.[28] In his article, "Transforming the Army Sustaining Base," Lieutenant Colonel Danny Nobles, now assigned to the Joint Staff, posits:

> Perhaps the main reason there has been so little discussion concerning sustaining base transformation is the subject is simply not exciting. Army Transformation debates have focused on doctrine, combat force structure, revolutionary weapons systems, and emerging technology. These are valid discussions; the Army's reason for being continues to be its ability to fight and win the Nation's wars. However, since base operations [installation management] are a key link to readiness, the United States [Army] risks the ability to project and sustain the force if it fails to consider the sustaining base.[29]

In other words, effective power projection capability for the Interim Force and the target Objective Force can only be maintained if, to a profound degree, equal attention is paid to transforming and modernizing of the deployment/redeployment platforms—the installations.

In their June 2001 article in Army, two of the Army's top engineers, Major General Hunter, the Army's Deputy Chief of Engineers and Colonel Gordon M. Wells, the commander of the Fort Worth District stated:

> Every Army leader knows well that equipment readiness is intrinsically linked to training readiness. Nevertheless...as we make the transition to more and more reliance on power-projection platforms, it is clear that training and logistics readiness are only two legs of a three-legged stool. While we have developed the best-trained and maintained Army in the world, we have managed to station our soldiers and units on second-class and third-class installations. **Our installations are very much on the verge of catastrophic failure because we have failed to fund their continued sustainment through a viable Army-wide installation maintenance program**...Ultimately, if the Army's installations are to be first class, major commands must begin to take a more active role in installation management.[30]

This observation was borne out in the Army's August 2001 Installation Status Report.[31] This report shows that as of August 2001 Army-wide quality ratings for installations were predominantly "C3 (Mission performance impaired)." Some officials within the Office of the Assistant Chief of Staff, Installation Management (ACSIM) believe these ratings are symptomatic of inadequate sustainment funding over the years. Their forecasts show that if funding for improving facilities is not increased dramatically all the categories in the Installation Status Report (ISR) will be rated "C4 (Mission performance significantly impaired)" as early as 2018.[32] One can logically conclude that this situation will worsen rapidly when adding the requirements to support Army transformation.

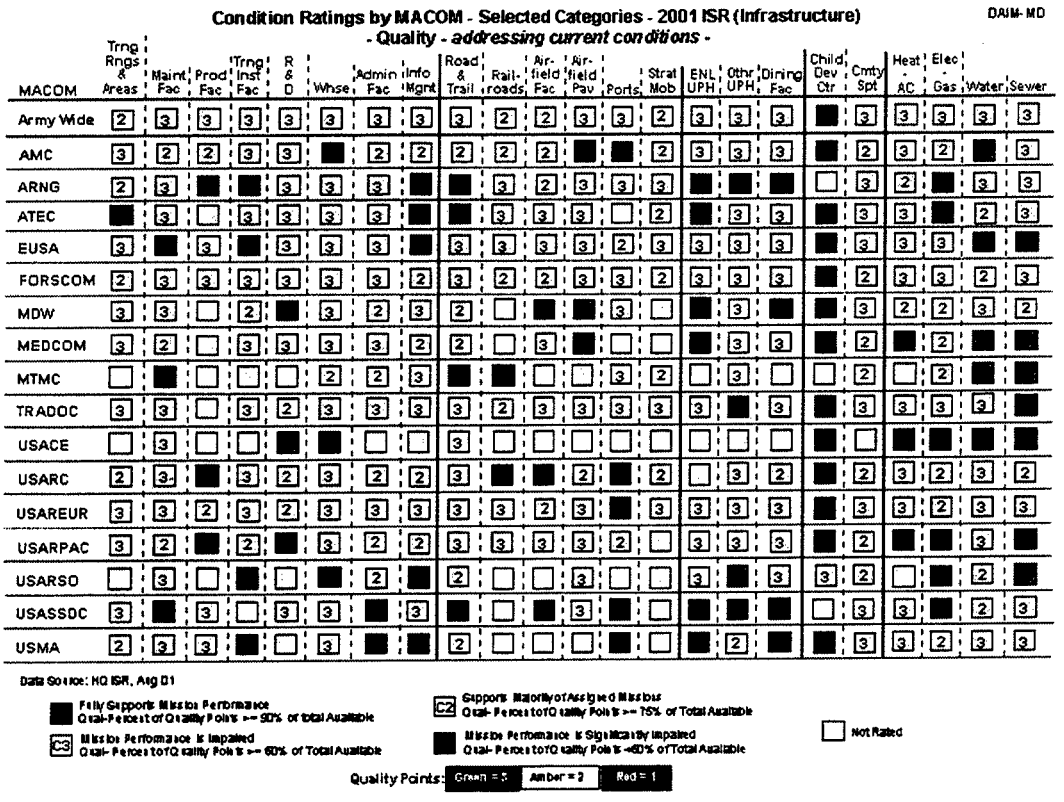

FIGURE 4: (U) INSTALLATION STATUS REPORT (AUGUST 2001)[33]

It is important that the Army not let its guard down in the area of providing top quality facilities. To support the axis of Focused Logistics in the Transformation Campaign Plan, the Army must continuously improve the sustaining base in behalf of its soldiers, civilian employees, and family members. The Objective Force will not be effective without quality support of its people. Providing competitive pay and childcare is only part of the picture. Installation commanders must also be given the resources to provide outstanding mission support programs and facilities. This is important if the Army is to attract and keep talented, dedicated people for manning the Objective Force. The Army needs to increase its investment in key support programs such as modern family/unaccompanied housing, superior training ranges and areas, and community support/administrative facilities. The Army should also seek technological breakthroughs for its facilities with the same passion it applies to modernizing the force. The AMP states, "The Army is not just about equipment. More than any other Service, the Army's capability is embodied in organizations made of soldiers."[34] General Shinseki reaffirmed this during his 27 September 2000 testimony at a Senate Armed Services Committee hearing on Military Readiness:

> [Today's soldiers] are burdened with too few personnel, aging equipment and poorly maintained facilities...They (soldiers) are a tremendous bargain for the nation. American soldiers have provided far more in readiness than we have

> paid for. But we should not expect such selfless devotion to include the sacrifice of their families' well-being."[35]

Therefore, investing to maintain and modernize facilities throughout the ramp-up to the Objective Force is as important to attracting and retaining quality soldiers as investing billions of dollars in emerging science and technology for tomorrow's weapons systems.

CAN INSTALLATIONS DELIVER?

Can Army installations deliver during deployments or redeployments? For now, the answer is a qualified "Yes." Those who have been intimately involved in force deployments and redeployments since Desert Shield/Desert Storm say that this is a "good news/bad news" story. Consultations with subject matter experts at the Army War College show that, when it comes to preparing its installations for force projection operations, the Army does some things very well but it needs to improve on several aspects.[36]

What is the Army doing well? First, the Army has been increasing its investments, albeit slowly, on infrastructure improvements through its Army Strategic Mobility Program (AMSP). Acquisition of In-Transit Visibility (ITV) technology such as Radio Frequency/Asset Identification Tags (RF/AIT) and improvements to unit movement planning and execution tools such as the Transportation Coordination-Army Information Management System (TC-AIMS) have greatly eased the burden on movement control managers. Fort Lewis, Fort Hood, and Fort Bragg[37] have developed and built facilities specifically reserved for power projection missions. At these locations, rail facilities, soldier readiness processing areas, vehicle maintenance areas, training facilities, fitness/recreation areas and temporary command posts have received more attention in recent years.

Second, installations have access to a personnel expansion capability in the Reserve Components. The Army has learned that Garrison Support Units, Individual Mobilization Augmentees (IMA), and Individual Ready Reserves (IRR) can profoundly increase an installation's power projection capability.

Third, the Army's Force Deployment Process Modernization Office and the ACSIM at Headquarters, Department of the Army (HQDA), have been aggressive in overseeing the incorporation of lessons learned from numerous deployments into installation processes and infrastructure. Through web-based Information Technology (IT) installation commanders now have access to real-time information on deployment operations and other power projection issues. For example, the ACSIM gives installation commanders the most recent "best practices" in a wide range of installation operations including force deployment support

operations through its monthly newsletter, Installation Functional Area Analysis Good Ideas Update.[38] Additionally, The ACSIM's Garrison Pre-Command Course, conducted at Fort Belvoir, Virginia, has done much to educate and prepare installation commanders for their roles in providing mission support and contributing to unit readiness.[39]

What are the shortfalls or deficiencies that need attention? Not surprisingly, the experts contacted provided a wide variety of viewpoints on this issue. Some point to the lack of material handling equipment such as the Rough Terrain Container Handler (RTCH) while others view inadequate infrastructure as the most critical "show stopper" in power projection operations. One expert felt strongly that, despite the proliferation of automated movement control technology, there is insufficient coordination and communication between installation commanders and transiting unit commanders while planning and executing deployments. Another expert warned that the infrastructures "outside the fence [of the installation]" are also deteriorating, thus diminishing or, in some instances, obviating the installation's effectiveness as a power projection platform. Clearly, installation commanders must also synchronize their transformation with officials in their respective surrounding community. This is especially critical when integrating and planning projects such as transportation nodes, infrastructure upgrades, road networks, supplemental housing, and family support programs. Installations located outside the continental United States (OCONUS) are particularly vulnerable because of their higher dependence on the host nation's ability and willingness to maintain its road, railway and waterway infrastructures. In particular, this has strategic implications for our installations in Europe that the Army has habitually used as a staging base for deployments to the Balkans, North Africa, the Middle East and beyond.

To some observers, these and other shortfalls have not completely paralyzed the Army's ability to project its forces. Arguably, successful deployments have not been totally dependent on "modern" facilities. Success during past deployment operations has in large part been achieved through tremendous leadership and cooperation between unit and installation commanders. As in every military operation, effectiveness in power projection depends heavily on effective Command, Control, Communications and Information (C3I). Responsive leaders and managers make RSOI work smoothly.[40] This may not be enough for the future. The Army, in concert with her sister services, has begun to improve its force projection infrastructure and processes. But, much more remains to be accomplished if installations are to evolve at the same pace as the Objective Force.

THE ROAD TO THE "OBJECTIVE INSTALLATION"

Reference libraries and official Army websites teem with procedural and doctrinal writings on force projection. Until recently, relatively little attention has been paid to positioning the installations to support the Objective Force. The news however, is getting better.

As was shown earlier in this paper, Army installations in the aggregate are struggling to sustain their ability to accomplish their day-to-day support missions. Fixing the current conditions on the installations is the first step toward making installations ready to support the Objective Force. Some fresh approaches toward reaching the "Objective Installation" have emerged. These approaches are the Army Facilities Strategy, the Transformation Template for Installations, and the Centralized Installation Management structure.

The Army Facilities Strategy (AFS) is a multi-phase program that focuses on installation infrastructure and programs. The proponents of the AFS use ISR data to make key resource allocation recommendations and decisions. Through the AFS, Army leaders aim to reverse the deterioration of installation infrastructure and set the vector for the modernization of installations in time to support the fielding of the Objective Force. Although the funding outlook is dim for the near term, senior Army leaders are setting a clear path to improvement through the AFS. According to Lieutenant Colonel Edward Womble, the ACSIM's Transformation Campaign Plan Officer, the Army's request to fund the first increment of the AFS in the Program Objective Memorandum (POM) 03-07 was funded at only 50%. Sustainment (also known as Sustainment Repair & Maintenance or SRM) funding has increased, although not [yet] to 100%. The Army wants to reach 100% sustainment funding by POM Year 07. There is a current backlog of $17.7 billion in facilities funding.[41] To keep the issue at the forefront, installation commanders are candidly reporting the true conditions of their facilities through the ISR.

The Transformation Template for Installations (TT-I) is the tool leaders are using to identify installation requirements for supporting the Objective Force. Meaningful progress can not be achieved without going through this process. In an effort to develop a single, coordinated list of Objective Force requirements, the OACSIM initiated the Transformation Template for Installations Working Group (TT-I WG) in September 2000. The TT-I WG is the Army's clearinghouse for ensuring that Objective Force requirements are translated into the installation architectures of the future. The working group coordinates with proponents throughout Headquarters, Department of the Army, major commands, and field operating agencies. The working group collects requirement data on a wide range of installation-related issues including training and deployment facilities, base operations, installation services and environmental impacts. The TT-I WG has thus far amassed a comprehensive list of requirements to support

the Interim Brigade Combat Team. The TT-I WG plans to incorporate requirements for the Integrated Division (IDIV) and the Objective Force Brigade Combat Team, as information becomes available.[42]

The detailed template, excerpts from which are shown at Figure 5, is indicative of the thought and coordination that has gone toward transforming the installations in parallel with transforming the fighting force. Notably, plans to prepare installations to house, train and project the IBCT both in CONUS and OCONUS seem to address many of the power projection lessons learned from ODS and other major deployments. These plans must also be applied across the board and in sync with the rest of the transformation effort.

The work being done by the TT-I WG is absolutely essential. Without such focus and parallel planning, the installations may not be in position to support the Objective Force in 2032.

EXCERPTS FROM DRAFT TRANSFORMATION TEMPLATE FOR INSTALLATIONS

As developed by the TT-I Working Group
Office of the Assistant Chief of Staff, Installation Management[43]

FCC	Title		Notes
	PART I		
	Unit Facilities	**Allowance**	
14185	Co. HQ Bldg	212,120 SF	30 Co HQ. **I3 reqmt for trng/opns.**
14183	Bn. HQ Bldg	69,060 SF	6 Bn HQ. **I3 reqmt for trng/opns**
14182	Bde HQ Bldg	15,399 SF	1 Bde HQ. **I3 reqmt for trng/opns.**
61050	GP Admin	19,764 SF	
17119	Org Classroom	29,340 SF	1 per Bn HQ. **I3 reqmt for indiv dist. Learning/trng.**
	Training Facilities	TBD	
	Other Admin Facilities	TBD	
72360	Dining Facility	69,714 SF	
44234	Unit Storage Facility	52,500 SF	
72170	Senior Enlisted BQ	14,212 DG	
85210	Org Parking	158,601 SY	**Potential I3 reqmt for**

			trng/maint of unit vehicles.
17180	Readiness Center	(TBD)	For NG units – not currently avail in RPLANS. **I3 reqmt.**
21407	Maintenance Center		
	Tactical Unmanned Aerial Vehicle (TUAV) Facility		**Support Facility Annex DRAFT finalized by USACE/PM in OCT 01. Facility to include A/C storage, maint., plt admin and trng areas. Need I3 linkage for trng/maint.**
	Fielding/New Equipment Trng (NET) Facilities		**Dual use facilities. FORSCOM DCSLOG to provide concept for facilities in NOV 01. Need I3 linkage for trng/maint.**
	Container Storage Yard/Fac.(T)		**Tentative requirement pending clarification of sustainment concept for IBCTs. IF concept calls for storage of sustainment stocks at homestation envision a requirement for container storage at installation for follow-on(after 72-96 hrs)resupply of IBCT.**
	Mission Support Trng Fac.(belongs in Trng Fac.)	**48,000 sqf (Tent.- per Ft Lewis)**	**Not previously added in template. Extensive I3 reqmts to facilitate installation/higher HQs interconnectivity for simulations/warfighter exerc/staff trng.**
	PART II Deployment Ops		
	POWER PROJECTION/ Deployment Facilities	**Suggested Requirements**	Notes(info based upon JIWG/ODCSLOG reqmts)

FIGURE 5. TT-I WORKSHEET

The Centralized Installation Management (CIM) is another important step toward transforming the installations. By centralizing management of the installations at the HQDA level, the Army hopes to eliminate a long-standing resource allocation dilemma facing field commanders: choosing between unit readiness mission and the upkeep and modernization of installations. Centralization will improve the synchronization between installations and the transformation. More centralized control will ensure funds get to the installation level and are spent for the intended purpose.

According to MG Van Antwerp, the Army's Assistant Chief of Staff for Installation Management, the CIM

> will provide high-quality, reliable and, efficient services through regional alignment. Implementation planning is an iterative process being coordinated between ACSIM, the HQDA staff and the MACOMs. The basic concept includes a provision for MACOMs to divest themselves of most installation functions and focus on their primary missions. Installation responsibilities will be administered through a centralized system consisting of field operating agencies and regional directorates who report to the ACSIM. Responsibilities of garrison commanders may expand slightly but major revisions of those responsibilities are not anticipated in the initial reorganization.[44]

On 18 December 2001, Secretary of the Army Thomas White and Vice Chief of Staff of the Army (VCSA) General Jack Keane announced the approval of the CIM concept. The VCSA explained how installation maintenance had heretofore taken a back seat to training and mission funding:

> ...frankly, we've had declining budgets for years and a lack of adequate resources to both—that is, the mission and the operational support for our installations. As a result of that, our commanders have had to make some pretty tough choices out there. The mission account [Operations & Maintenance, Army (OMA)] always comes first, so if you look at our Army installations, you can recognize what's taken place out there...We think we can gain some efficiencies, standards for those installations and prioritize the dollars against those standards based on need"[45]

The stated goal of CIM is to ensure that standards, funding decisions, and management are immune to the dilemmas field commanders face when deciding whether to spend money on missions or on maintenance of facilities. At the same briefing, Secretary White pointed out that, "the money gets there [to installation commanders] more directly, so it's not filtered through a bunch of intermediate headquarters on the installation side...the standards, the budget execution, and the tracking will be set up on a much more direct line."[46]

The CIM structure will be implemented on 1 October 2002. On 19 December 2001, the Assistant Secretary of the Army for Installations and Environment (ASA(I&E)) issued a CIM

Implementation Plan. Among other things, the plan realigns elements of the ASA(I&E) and portions of the ACSIM to "reshape the organization into a more streamlined headquarters, create a more agile and responsive staff and reduce layers of review and approval." [47]

Although the CIM initiative seems to be in line with Army Transformation, many questions are still being asked and, for some, the answers are not yet forthcoming. Not surprisingly, some skeptics and those who are uncomfortable with massive change see second or third order effects of centralizing the management of installations. For example, some doubt that the new structure will be responsive to local issues and needs. Still others scoff at what they feel may be an attempt to "control local command prerogatives." An examination of the CIM Implementing Plan shows HQDA is vague about what specific roles "mission commanders" will play in the daily operation of the installations on which they are tenants. In the end, however, the CIM concept will probably prove to be an appropriate foundation for the continuous modernization of Army installations. The CIM, if successful, could be the springboard for centralizing military installation functions at the DoD level.

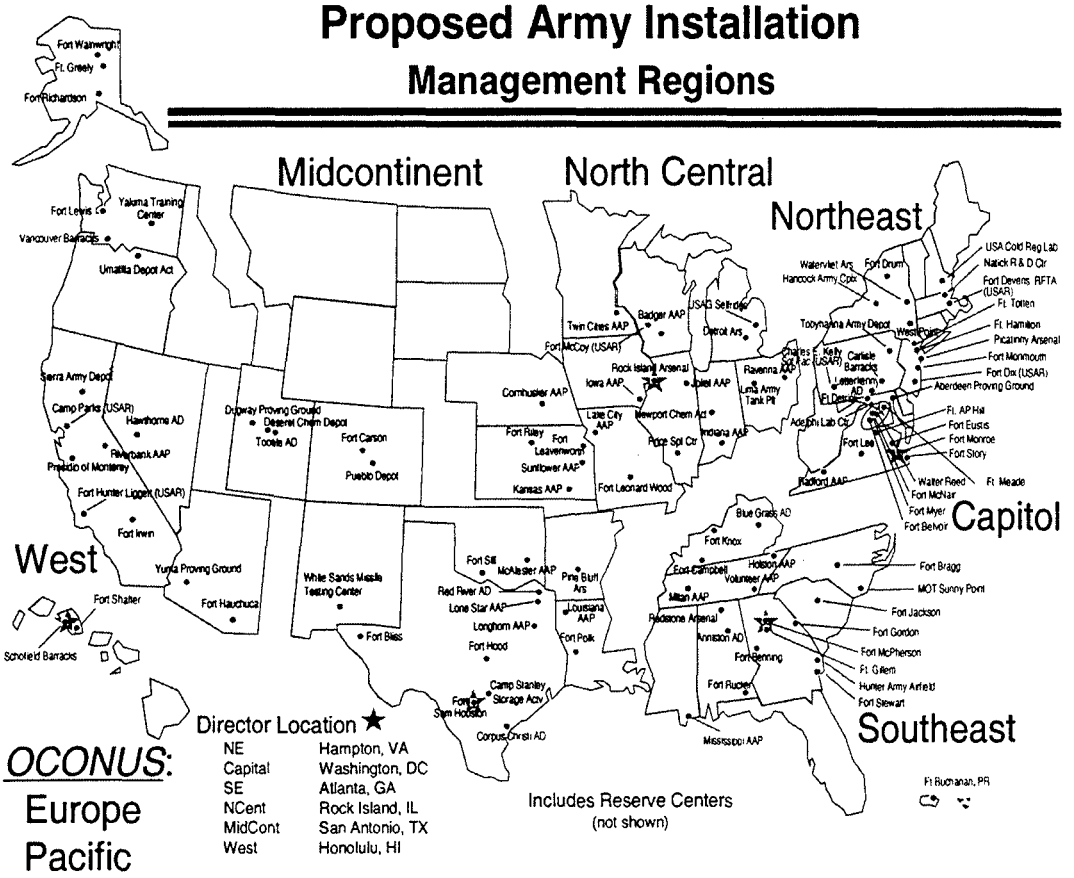

FIGURE 6. CIM REGIONS [48]

SUMMARY

In summary, this paper has focused on Army installations and the part they play in power projection. The emphasis was not on the Army's past decisions to place a secondary priority to installations. Rather, the purpose was to set a baseline for Army leaders to consider while making future decisions about how installations will be transformed and configured properly to support the Objective Force. The Army needs to take a more balanced, synchronized approach to transformation so that it gives *equal* attention to the modernization of its forces and the quality and capability of installations. The examples of force projection support shortfalls listed at the beginning of this paper were fixed "on the run" through heroic efforts by outstanding leaders and managers. That does not have to happen in the future.

This paper has shown that installations are not yet in sync with the Transformation effort. Indicators are that leaders are beginning to solve the synchronization problem. The Army has begun to realize that it can no longer accept the risks it has taken in the past with regards to maintaining and modernizing its facilities. The evidence also shows that there is some movement toward making our installations more capable of supporting not only day to day activities but also supporting the CSA's vision of an agile force. In other words, the terms "focused logistics" and "full spectrum dominance" must conceptually include the significant part Army installations play in projecting the forces.

FIRST STEPS

The research shows that before installations can move forward they first have to be fixed. Currently, the Army's installation readiness rating is at C3 overall. The Objective Force is to be a first class force that requires first class support. The Army's immediate problem is to restore its installations to first class status. "First class status" means that installation commanders receive and apply adequate resources not only to maintain infrastructure but also to continually share in the acquisition and application of emerging technologies for the Objective Force.

To ensure installations are capable of performing their current missions, the Army needs to focus serious command attention and infuse significantly increased resources to prevent erosion to C4 rating. To prevent a further decline in installation readiness and to ensure installation transformation, the Army needs to revise its Army Modernization Plan so that it explicitly addresses installation modernization as a parallel issue on the same level as the modernization of combat force capabilities. The AMP should now include an action plan that outlines, at the minimum, the timeline (synchronized with the Objective Force timeline), the

resources projected to accomplish the modernization, and the agencies assigned to plan, prioritize, execute and oversee Installation Modernization.

Initiatives, plans, and programs such as AFS, TT-I, and CIM described herein are great beginnings that can ensure synchronization. These initiatives also add to the effort to attract and retain quality soldiers for the future. To improve the effort, some serious consideration must be given toward taking the Army's Centralized Installation Management to a higher level. That is, to centralize all military installations at the Department of Defense level. Establishing the "Joint Installation Management System (JIMS)" can be a crucial step toward standardizing the quality and capability of all military installations. Notwithstanding unique service requirements, all military installations should have the same basic capabilities for support missions such as power projection, base support services (e.g., equipment maintenance areas, law enforcement, troop assembly areas, housing, training facilities, and MWR services) and force protection. In JIMS, funds and programs for sustaining and modernizing installations would be clearly protected and coordinated at the DoD level. If military operations are in a joint environment, then this aspect should also be viewed in a joint context. Army leaders at all levels must embrace the impetus provided by these initiatives. Leaders must ensure that innovative ideas and proposals do not fall into the trap of a complex resource allocation maze where they are doomed to oblivion.[49]

FUTURE STEPS

In addition to sustaining installations, the Army must commit resources to redesigning installations. The installation of the future must be replete with the same technological features as the forces that will be living, training, and working on those installations. Installation commanders of the 21st Century must be given the same operational situational awareness as that given to combat commanders. The Army must ensure installations receive the same IT technology that is given to Objective Force units that are either home stationed at or transiting through those installations. In other words, installation commanders should be one of the first, not one of the last, to know about unit operational requirements they need to deliver. The commander of an Objective Installation should "see" everything and anything regarding his or her installation by simply querying his or her desktop computer. The installation should be managed and operated from a state-of-the-art Base Operations Information Center not unlike the Combat Information Center on the U.S. Navy's ships or the Tactical Operations Center in a digitized division. Tenant unit commanders and agencies should be able to communicate with

their installation commander (from anywhere in the world) with the same fidelity and speed that are being "hardwired" into combat units today.

CONCLUSION

The future is never as clear as anyone would like it to be. Yet, progress is impossible without a vision for the future and taking risks to realize that vision. The CSA has given the Army that vision. Now it is time to work hard toward realizing that vision. It is absolutely vital that the Army balance the transformation of its forces with equal emphasis on the modernization of its installations. As illustrated in the metaphor at the beginning of this paper, Army leaders must wield the numerous reins of the transformation with equal attention. Transformation must be conducted holistically. The Army must aggressively address the readiness and quality of its installations in relative proportion to all other transformation plans and actions. If the Army does not do this, the effectiveness and capability of Objective Force will be jeopardized. By applying the same commitment to its installations as it has given to achieving the Objective Force, the Army will not only fix today's deficiencies permanently but also will prevent them.

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ENDNOTES

[1] The 21st TAACOM was reorganized and renamed 21st Theater Support Command in 1999.

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[15] William Crowder, et al, Technology and Power Projection for the Army After Next, Land Power Essay Series (Arlington: Association of the United States Army, November 1997), 3.

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[28] From personal experience and observations while assigned as Chief of Staff, 6th Area Support Group, Stuttgart, Germany 1999-present.

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GLOSSARY

ACSIM	Assistant Chief of Staff, Installation Management
ADACG	Airfield Departure/Arrival Control Group
AFS	Army Facilities Strategy
AMC	Army Materiel Command
AO	Area of Operations
APOD/E	Aerial Port of Debarkation/Embarkation
ASA(I&E)	Assistant Secretary of the Army, Installations & Environment
ASMP	Army Strategic Mobility Program
BASOPS	Base Operations
C3I	Command, Control, Communications and Information
CIM	Centralized Installation Management
CG	Commanding General
CJCS	Chairman of the Joint Chiefs of Staff
CONUS	Continental United States
CSA	Chief of Staff of the Army
DPC	Deployment Processing Center
FORSCOM	Forces Command
HQDA	Headquarters, Department of the Army
IBCT	Interim Brigade Combat Team
IDIV	Integrated Division
IFOR	Implementation Force
IMA	Individual Mobilization Augmentee
IRR	Individual Ready Reserve
ISB	Intermediate Staging Base
ISR	Installation Status Report
IT	Information Technology
ITV	In Transit Visibility
JIMS	Joint Installation Management System
MACG	Marshalling Area Control Group
MACOM	Major Command
MWR	Morale, Recreation and Welfare
NATO	North Atlantic Treaty Organization

NGB	National Guard Bureau
OCONUS	Outside the Continental United States
ODS	Operation Desert Shield/Storm
OMA	Operations & Maintenance, Army
OPCON	Operational Control
POM	Program Objective Memorandum
QDR	Quadrennial Defense Review
REFORGER	Return of Forces to Germany
RF/AIT	Radio Frequency/Asset Identification Tags
RSOI	Reception, Staging, Onward Movement, and Integration
RTCH	Rough Terrain Container Handler
SecDef	Secretary of Defense
SPOD/E	Seaport of Debarkation/Embarkation
SRM	Sustainment Repair & Maintenance
SRP	Soldier Readiness Processing
TAA	Total Army Analysis
TAACOM	Theater Army Area Command
TC-AIMS	Transportation Coordinator-Army Information Management System
TRADOC	Training & Doctrine Command
TT-I WG	Transformation Template for Installations Working Group
USARC	United States Army Reserve Command
USAREUR	United States Army, Europe
USARSO	United States Army, South
USEUCOM	United States European Command
USFK	US Forces Korea
USR	Unit Status Report
VCSA	Vice Chief of Staff of the Army

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