

RAF and Fires Warfighting Function

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This is not a time for retrenchment. This is not a time for isolation. It is a time for renewed engagement and partnership in the world.

—Secretary of Defense Leon E. Panetta¹

As the Army transitions from its operational mission in Afghanistan and sets the conditions for the Army of 2020, a new strategy for managing forces is being developed that regionally aligns Army units to combatant commanders (CCDR) to meet their needs, including, but not limited to, employment in steady-state, theater security cooperation activities and phase 0 and phase 1 operations of OPLANs. In concept, Regionally Aligned Forces (RAF) provide a scalable and tailorable capability to meet requirements for familiarity and understanding of the culture, geography, history, socio-economic issues, and operational environment in which Army forces operate. This report provides an analysis of the fires warfighting function (WfF) through the lenses of doctrine, organization, training, materiel, leadership and education, personnel, and facilities (DOTMLPF); captures opportunities and risks; and analyzes how the fires WfF should transform to better support the RAF concept and implementation. Recommendations that will enable the Army to better realize the full potential of RAF are advanced. They include changes to organizational manning policies, lifecycle management, operating doctrine, professional military education, mission-specific training, and equipment. As the Army embarks on this new operations paradigm, taking the time to weigh ideas and identify better solutions to the challenges faced in today's environment is critical.

The RAF concept endeavors to regionally align U.S. Army maneuver brigades, division headquarters, functional brigades, and other supporting units to a specific geographic region in support of the geographic combatant commanders' (GCC) land force mission requirements. This focused regional alignment of capability to operational requirements provides a much needed and readily usable source of cultural awareness and builds capability for Army units to "operate in a complex environment with an emphasis on the human domain."²

The concept of regional force alignment to a geographic combatant command provides a fresh and innovative method for managing readiness and availability of Army forces. The RAF concept is integral to the Army vision of being "Globally Responsive and Regionally Engaged"³ and it is fundamental to the Army's ability to "prevent, shape and win"⁴ across the globe. Furthermore, the concept is "essential to the U.S. defense strategy and represents the Army's commitment to provide culturally attuned, scalable, mission-prepared capabilities in a changing strategic environment characterized by combinations of nontraditional and traditional threats."⁵ According to the Department of the Army G3/5/7:

Army Regionally Aligned Forces are defined as 1) those units assigned to or allocated to combatant commands, and 2) those service-retained capabilities aligned with combatant commands and prepared by the Army for regional missions. They are drawn from the total force, which includes the Active Army, the Army National Guard, and the Army Reserve. They consist of organizations and capabilities that are: forward stationed; operating in a combatant command area of responsibility; supporting (or ready to support) combatant commands through reach back capabilities from outside the area of responsibility. They

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conduct operational missions, bilateral and multilateral military exercises, and theater security cooperation activities.⁶

The RAF concept takes a new approach in managing Army forces and aligns capabilities to meet a CCDR's steady state requirements. Regional alignment of forces allows the CCDR and Army service component command (ASCC) to integrate a regionally focused and culturally aware force into theater security cooperation operations and regional contingencies by providing more predictable capability.⁷

Improved predictability is foundational to the Army enterprise and the combatant commander because the Army is better able to forecast and fund operational requirements in an era of fiscal austerity. Additionally, in a period of reduced overall manning and declining budgets, the Army must be efficiently manned, trained, and equipped to meet numerous and varied requirements of the volatile, uncertain, complex, and ambiguous (VUCA) global challenges to U.S. national interests.⁸ The RAF concept supports the combatant commander's theater security cooperation activities with a clearly identified, available, regionally aware, and mission-trained unit. As a cost-effective means for applying landpower, the RAF concept incorporates low-level, persistent engagement to prevent larger, more costly conflicts.

RAF detractors have seized on initial considerations to point out faults and generally advance three criticisms. First, the cost and time required to achieve language proficiency is too onerous. Second, RAF creates excessive mission duplication between conventional forces and Special Forces. And third, RAF might create "have" and "have-not" units, where the "haves" will enjoy habitual, repeated alignment to a high-profile geographic region with ongoing, high profile missions, training opportunities, and funding, while the "have-nots" will continually return to a region that offers fewer training opportunities and less operational funding.⁹ While these are valid concerns, thoughtful and deliberate planning will mitigate the risks and amplify the rewards.

When initially unveiled, the RAF concept touted language and cultural awareness as foundational pillars. Although the RAF concept incorporated foreign language familiarity in the context of developing cultural and language capability, the Army never envisioned that Soldiers would become fluent, or even conversational, in a foreign language. Almost 2,000 languages are spoken in Africa, another 2,000 in Asia, and over 200 in Europe,¹⁰ making it impossible to base effectiveness or validity of the RAF concept on linguistic facility with a native language. Yet, importantly, the RAF concept will require language and cultural sensitivity if not fluency per se.

The Army spent \$12.3 million preparing 848 Soldiers during a 16-week pre-deployment Afghan language training course between 2009 and 2010.¹¹ Even with this massive investment of time and money, there was almost no sustained language proficiency upon redeployment.¹² Given the high cost of training an individual to relatively minimal language proficiency, the inherent flexibility of hiring interpreters to meet specific operational needs, and the uncertainty of deployment locations and varieties of local dialects, the Army should acquire language skills through the use of professional interpreters augmented by bilingual local nationals and military linguists. Given these considerations, the pre-RAF language training should focus on learning salutations, a few conversational phrases, and key words to help establish rapport.

Prior to 9/11, Special Forces had primacy for training foreign security forces and developing regional expertise. Since 9/11, focused special operations counter-terror missions have created a partner-training capability void that is currently being filled by conventional forces. There is, however, no intention to place RAF units in competition with Army Special Forces. For example, conventional Army forces have been actively training Afghan and Iraqi security forces for the past decade and, consequently, have gained valuable capability and experience. With continued commitment of Army Special Forces to the Global War on Terror, conventional forces should see increased opportunities to train partner nation militaries in a variety of tasks. In

fact, the conventional force – Army Special Forces relationship should become increasingly more complementary rather than competitive. A regionally-focused conventional force could augment a deployed Army Special Forces team and multiply the effect of having U.S. military trainers in a host nation. By partnering with a RAF unit to conduct foreign security force assistance (SFA) training, Army Special Forces will benefit by receiving a culturally aware and regionally trained force multiplier while conventional forces gain from working with true regional experts.

As the Army draws down and in the face of an uncertain fiscal environment, resource equity will be a constant point of debate. For example, some units (e.g. the Global Response Force (GRF) and those forward deployed) will understandably receive a larger allocation of training and equipping dollars based on assigned or potential missions and corresponding readiness requirements. The issue of equity is compounded within the RAF discussion due to varying requirements and operational budgets of the geographic combatant commands. The argument might revolve around the idea that a brigade habitually assigned or aligned with USSOUTHCOM, for example, would not receive the missions and corresponding resources of a brigade assigned or aligned with USCENTCOM or USPACOM; and over time some assignments will be considered undesirable and fail to attract the best and brightest leaders, essentially relegating some to a second-tier status. While this could occur, the RAF rotational plan does not repeatedly align the same brigade to the same geographic CCMD.¹³ In short, the RAF concept mitigates the “have” versus “have-not” problem.

Given this background, analysis of the fires warfighting function in light of the RAF concept is appropriate. Looking through the lens of DOTMLPF, the following analysis draws upon three assumptions. First, all decisions are guided by current fiscal realities and the pending drawdown of Army forces. Second, not all GCCs will warrant equal requirements with respect to priority, funding, or force allocation. And third, the RAF concept is not an “all or nothing” concept. Not every unit needs to be aligned with a GCC.

Fires Warfighting Function and DOTMLPF Analysis

According to Army doctrine, the fires warfighting function “is the related tasks and systems that provide collective and coordinated use of Army indirect fires, air and missile defense, and joint fires through the targeting process.”¹⁴ Additionally, the fires warfighting function is responsible for “deliver[ing] fires in support of offensive and defensive tasks to create specific lethal and nonlethal effects on a target. The fires warfighting function includes the following tasks: deliver fires; integrate all forms of Army, joint, and multinational fires; and conduct targeting.”¹⁵

The fires WfF generally includes: the field artillery (FA) that “destroys, defeats, or disrupts the enemy with integrated fires to enable maneuver commanders to dominate in unified land operations;”¹⁶ the air defense artillery (ADA) whose mission is “to protect the force and selected geopolitical assets from aerial attack, missile attack, and surveillance;”¹⁷ and inform and influence activities (IIA) that are defined as “the integration of designated information-related capabilities in order to synchronize themes, messages, and actions with operations to inform United States and global audiences, influence foreign audiences, and affect adversary and enemy decision-making.”¹⁸ IIA includes such functions as public affairs (PA), military information support operations (MISO), combat camera, and civil affairs (CA) operations.¹⁹

The U.S. Department of Defense (DoD) analyzes capability gaps and seeks mitigations based on the framework known as DOTMLPF. A capability gap is essentially a shortcoming or warfighting challenge that has not been encountered before and to which a solution is needed. The joint capabilities integration and development system (JCIDS) is the formal DoD procedure which defines acquisition requirements and evaluation criteria for future defense programs; DOTMLPF is a component of this system. The remainder of

this report analyzes each DOTMLPF component and offers recommendations related to capability or capacity gaps created by the implementation of the RAF concept.

Doctrine

Doctrine analysis examines the way the military conducts operations with emphasis on maneuver warfare and combined air-ground campaigns to see if there is a better way to solve a capability issue or procedural shortcoming. Moreover, this analysis seeks to determine whether existing doctrine adequately addresses the current and future needs of the force and whether existing operating procedures are causing or ameliorating any of these needs.²⁰ The RAF concept does indeed place some unique challenges on Army doctrine, and the Army is responding.

The Army has undertaken the monumental task of refining, revising, and updating its doctrine to reflect the changing realities of modern armed conflict and to make doctrine more concise, understandable, and sensible. An outstanding example of this effort is Field Manual (FM) 3-22, *Army Support to Security Cooperation*. This manual evolved from FM 3-07.1, *Security Force Assistance (SFA) Headquarters*. The newer version more effectively addresses the full spectrum of security cooperation instead of the much narrower task of security force assistance. Although security force assistance still features prominently in FM 3-22, this manual more effectively links security cooperation to the combatant commander's theater campaign plan (TCP) and walks the reader through the process from legal authorities for action, how to plan for and employ the force, and how to build relations with partner nations and security forces. Combined with the new FM 3-22, existing fires doctrine adequately addresses the range of military operations, but must remain alert to the evolving requirements of the RAF concept.

Organization

Organizational analysis examines how we are organized to fight. It looks to see if there is a better organizational structure or capability that can solve a particular capability shortcoming. Organizational analysis also seeks to identify a problem source and to determine whether the organization is properly staffed, structured, and funded.²¹ Current fires organization is structured to mass effects at a decisive point on the battlefield. The RAF concept requires decentralized operations across vast areas and will challenge current fires command and control structures.

An examination of the RAF concept should explore how to gain efficiencies in organizational activities; define the functions of the aligned forces; and identify windows of opportunity to modify organization, manning, and equipment within formations. For the purpose of this analysis, the fires brigade is examined but the concept is applicable to any brigade-sized formation directly supporting a division headquarters. Smaller organizations, such as fires battalions, will likely require only task organization changes to support RAF missions.

The U.S. Army is determining the best way to reduce its two-star and higher headquarters staffs and other parts of the force by 25 percent amid another round of federal budget cuts. In August 2013, Army Secretary John McHugh stated, "Let there be no mistake, aggregate reductions will take place."²² Furthermore, Army Chief of Staff Gen. Raymond Odierno added, "The money is gone; our mission now is to determine how best to allocate these cuts while maintaining readiness. We expect Army leaders, military and civilian, to seize this opportunity to re-shape our Army. This effort will take priority over all other Headquarters, Department of the Army activities."²³

Based on the projected 25 percent reduction in capacity at corps and ASCC headquarters, the Army must generate innovative solutions to maintain capability while simultaneously developing RAF headquarters'

regional awareness. One possible opportunity to enhance the regional awareness and engagement of the aligned division headquarters and associated functional brigades is to deploy a portion of the RAF division headquarters in a contingency command post (CCP) package to augment the ASCC staff for a short duration. The standard CCP manning would be modified for each augmentation cycle to provide the same relative capability to the ASCC HQ with different people. This modification would provide the RAF division headquarters staff the opportunity to gain regional awareness and develop personal relationships with their ASCC counterparts while augmenting the capabilities of the ASCC.

In modeling the above concept, the fires brigade (FiB) staff should divide into four equally capable CCP support sections based on ASCC requested capabilities, and rotate to the ASCC headquarters (HQ) for 3-month augmentation periods. With this concept, and over a 2-year assignment, a member of the aligned FiB headquarters staff would have 6 months forward deployed and dedicated to the region. In cases where the GCC or ASCC HQ is located in CONUS, the FiB CCP support section could further deploy to a forward element or joint task force in the GCC area of operations. Deployed division or FiB staff CCPs do present risks to ongoing garrison support capabilities. However, the advantages of forward deployed and regionally aware staff sections more than offset the risks, which can be mitigated by the garrison mission support element.

Inform and influence activities are capabilities that could be better shaped to support the RAF concept and the GCC steady-state missions. As currently structured, no single organization contains all of the IIA capabilities oriented on a distinct geographic region. The Army should consider creating IIA battalions, aligned with each geographic combatant command, consisting of companies with specific focus areas within that region and overlapping capabilities. For example, AFRICOM could have an IIA battalion that conducts IIA in support of the theater campaign plan with each of its four companies focused on a different subordinate regional campaign plan. Additional companies should be built in the reserve component to reinforce the active structure and provide focused regional capacity as part of annual training requirements.

These IIA companies would develop an in-depth understanding of the culture within the region and enhance the CCDR's messaging while simultaneously maintaining enough theater-wide awareness to augment each other as required. Furthermore, the division, corps, and ASCC headquarters would all retain their IIA cell (formerly the G7) to serve as a planning and coordination capability and conduit to the theater IIA battalion as required for mission execution.

Another force multiplier available for integration into the IIA function of the RAF concept is the foreign area officer (FAO). The FAO possesses unique training and skills to include language proficiency, an in-depth understanding of regional dynamics and political-military activities, and an understanding of U.S. strategic objectives in the region.²⁴ The addition of a FAO to a division staff performing a RAF mission would not only serve as a force multiplier, but would also serve as a valuable learning opportunity for the FAO. After the FAOs return from their initial in-country tour they could be assigned to a division staff, potentially in the G7, that is about to assume a RAF mission in the region where the FAO just completed a tour. A FAO brings Department of State (DoS) experience to the division staff and could serve as a valuable liaison to the U.S. embassy in the country where RAF forces are operating.

After this initial tour with a division staff and additional skill training, the FAO could be assigned to an embassy or ASCC headquarters and develop additional regional expertise. A broad understanding of Army force employment would serve FAOs well as they advance to intergovernmental assignments in embassies around the globe. These recommendations would require the accession of additional FAOs, perhaps as many as 20 more per year, to service the division and ASCC headquarters' requirements. Doing so would allow the Army to begin assessing them earlier in their career, thereby enhancing training dividends while developing more proficient senior-level FAOs.

Training

Training refers to the preparation of forces for the tactical fight and includes all activities from initial entry training (IET) to unit collective training. Analysis of training carefully examines all activities to see where improvements can be made and capability gaps closed.²⁵ Fires training should always focus on the core competencies required to deliver fires in support of maneuver forces, but the RAF concept also requires the versatility and adaptability shown in previous deployments, such as OIF and OEF missions.

The current concepts of training Army forces are commensurate with the development of the RAF strategy. As the CSA stated in October 2012 at the Association of the United States Army Conference, “The approach to accomplishing operational tasks is by organizing around highly trained squads and platoons that are the foundation for our company, battalion and brigade combat teams, organized for specific mission sets and regional conditions.”²⁶ This CSA-directed training strategy allows for fully trained troops to be available with the requisite skills, providing a full range of military capability to address global requirements. It also provides the CCDR many unique regional capabilities for executing portions of the theater campaign plan. In fact, training for the full range of military operations is a cornerstone of the Army’s mission and the RAF concept provides an opportunity for conventional forces to develop and hone skills that are useful throughout the spectrum of decisive action operations.

Any unit assigned a RAF mission must also be available to service global contingencies and must be trained to a decisive action standard that includes the ability to execute offense, defense, and stability operations.²⁷ This standard recognizes and accounts for a wide range of threats to include “guerrilla, insurgent, criminal, and near-peer conventional forces woven into a dynamic environment.”²⁸ Significantly, the proper implementation of the decisive action training standard will assist combatant commanders in dealing with these threats. Moreover, this training standard sets the conditions for the mission command culture that RAF requires for dispersed and decentralized regional engagements.

When a unit trains for a specific mission to the exclusion of all others, this unit will experience degradation in its capability to perform the full spectrum of tasks required for decisive action. The Army clearly experienced this phenomenon when it assigned convoy security missions, instead of traditional fires tasks, to field artillery battalions in OIF and OEF. Although these battalions gained proficiency in the assigned tasks and performed well in combat, many of them were not able to deliver fires in support of maneuver operations to the level required in a decisive action environment. In the white paper titled *The King and I: The Impending Crisis in the Field Artillery*, three former maneuver brigade commanders lamented the fact that field artillery units were not able to adequately compute a technical solution, provide fire support coordination, or deliver fires due to their commitment to counter-insurgency (COIN) operations.²⁹ Most striking was not the experiences and assertions by these former maneuver commanders, but rather the hard statistical data collected at the combat training centers that supported the claims. The combat training centers are the closest venue to decisive action short of actual combat and they evaluate a unit against an established standard, a standard that few FA units were able to meet after executing non-standard missions during previous deployments.³⁰

A decision to trade core task proficiency for other skills must weigh the cost and benefit of the selected option. Loss of decisive action capability is a very real concern in servicing RAF requirements. The Army will have to establish new acceptable standards for readiness across the RAF force. Is there an expectation that an FA battalion conducting RAF would be able to reform and execute massed fires in support of a maneuver operation? If so, what is the acceptable time frame for this to occur?

One possible mitigation strategy for this risk, proposed here as “2+2,” attempts to solve the possible dichotomy between RAF and decisive action. In this model, a BCT and its organic fires battalion would spend 2 years trained to a decisive action standard and held in a contingency response force (CRF) pool, followed by

a 2-year RAF mission. The decisive action period would begin with units trained to a battery live-fire standard, progress through battalion and brigade live-fires, and culminate in a CTC rotation within 6 months, establishing the unit as highly trained and available for world-wide deployment in support of contingencies. For the remainder of this 24-month RAF period, the unit would experience a controlled decline from a T-1 to a T-2 readiness level and have a plan to achieve T-1 within a specified time after deployment notification.

During the last quarter of the CRF period, a unit would shift away from decisive action tasks and begin focusing on the assigned RAF mission. During this period, the minimum training standard becomes battery live-fire and this standard is maintained during the entire 24-month RAF period. Additional unit training focuses on regional specific requirements directed by the CCDR to support the planned activities and engagements over the next 2 years. During this 24-month RAF period, a unit would maintain trained batteries without ever dropping below a T-3 training standard. If contingencies arose that required more units than exist in the standing CRF pool, commanders could pull units from RAF missions and begin training them back to a T-1 decisive action standard. As a result, the Army would still be able to generate an operational reserve to meet un-forecasted contingencies.

Due to a relative shortage of available units, fires brigades, recently re-flagged division artillery headquarters, and other functional organizations associated with divisions would not always be able to support consistent “2+2” rotational timelines. There are currently ten deployable division headquarters and six GCCs. Three division headquarters are not available, however: the 82nd (GRF), 2nd (Korea), and 25th (PACOM assigned), and two GCCs (USNORTHCOM and USPACOM) would not receive aligned division headquarters, leaving seven divisions to align with four GCCs. In this scenario, a fires brigade associated with a division may be required to spend only 18 months in the CRF pool for every 24 months aligned to a GCC for RAF missions. FORSCOM would have to manage units that cannot support the “2+2” model using staggered rotational timelines.

The reserve component also offers significant advantages by aligning units with GCCs. However, due to the limited training time available to reserve component units, the Army cannot expect them to remain consistently proficient in both decisive action and TSC tasks. Instead, the Army should build on the existing state partnership program and have National Guard units strengthen their formal and long-term relationships with partner nations. These National Guard units then participate in exercises, exchanges, and training missions with the partnered nation in support of the GCC TSC objectives. The Army might do well to explore ways to strengthen Army Reserve and National Guard regional alignment with each GCC.

While the above “2+2” recommendation is one possible solution for the readiness challenges faced with the RAF concept, the Army must not trade readiness for expediency. Instead, Army force managers must determine an acceptable level of readiness at various points in a unit’s life cycle and not employ units beyond their capabilities without adequate time and resources to train to new requirements.

As part of the fires WfF contribution to the RAF concept, fires Soldiers will likely be required to conduct engagement with and training of host-nation security forces on tactics, techniques, and procedures (TTP) for employing the host nation’s fires-related systems. The challenge with such tasks is the variety of systems among partner nations. The nations within a single combatant command will likely possess artillery pieces from the U.S., former Soviet Union, China, France, and possibly other sources. Therefore, U.S. Soldiers may be asked to provide training to partner nations on systems U.S. Soldiers have no experience operating. There are three possible mitigating solutions to this challenge: 1) provide only tactical employment training to the foreign security force (FSF) leadership, 2) retain third party experts to conduct the training U.S. forces are unable to provide, and 3) train U.S. Soldiers on the weapon system prior to deployment.

As an example of the first solution and using a short-range air defense system, the trainers could provide the FSF leaders with TTPs to employ the systems from the aspect of planning for employment, C2, sustainment, identifying, tracking and engaging threats, and other basic tenets of air defense but not operator-level employment of the specific weapon system. This option is the easiest and least costly but increases the risk of creating host nation leaders who can effectively employ the system capability in a tactical scenario but with crews who are unable to deliver the required fires.

The second solution of utilizing third-party experts would complement the first solution and provide the GCC commander with the option of providing operator-level training on a weapon system. The third-party trainers could be allied nation forces or contractors hired to provide the training and technical assistance that U.S. Soldiers are unable to offer. Although this is a solution to the problem associated with a specific skill, it could be troublesome from a political perspective and create more difficulties than it solves. Complicated or nonexistent status of forces agreements (SoFA) for third country military or contracted civilians, an inability to provide quality control over the instruction, and third country military members working toward policy goals that may not be fully in line with U.S. objectives are all challenges that the CCDR must consider. Furthermore, contractors can be expensive. Although used extensively over the past 13 years of war, declining U.S. defense budgets may well render contractor assistance cost prohibitive.

The third and final option is to train our Soldiers on the system as part of the preparation to execute the SFA mission. Fortunately, the field artillery has proven its ability to execute this option. For example, in 2010 the Army tasked the field artillery to train Afghan army cannonneers on the D30 cannon system. The tasked unit deployed to the Joint Multinational Readiness Center (JMRC) to receive training from an allied nation on the D30 weapon system prior to deployment to Afghanistan. In this case the cannon crewmen were able to sufficiently master the D30 weapon system employment, operation, and maintenance to provide value-added training to our Afghan partners. None of these three options are mutually exclusive and they provide the GCC the flexibility to achieve TSC goals in the most economical manner. Depending on the time and money available prior to implementation and the scope of the training, any or all may be viable.

Materiel

Analysis of the materiel aspect of DOTMLPF carefully considers the systems and equipment used by our organizations and units to ensure end-to-end capability across the range of military operations. Material analysis also attempts to determine capability gaps and the extent to which inadequate systems or equipment is the cause of these gaps.³¹ Conventional force units are equipped primarily to execute decisive action missions. The emergence of RAF missions will require equipment not generally available through existing logistic functions.

In an era of fiscal austerity, Army requests for more or improved equipment will prove challenging. However, no analysis of options is complete without considering equipment shortcomings and mitigation measures for these shortcomings. The fires WfF is structured and equipped around a very specific mission and organization, possessing limited flexibility to execute non-standard missions without augmentation. While recommendations for RAF mission-specific equipment are best reserved for mission analysis and course of action development, some generalities are worth discussion, especially general shortfalls and procurement procedures once the Army identifies and validates requirements. For example, a field artillery battalion is equipped around the concept of employing batteries as single units under the centralized control of a battalion fire direction center. This employment requires short-range communications within the battery and medium-range capabilities from the battery to the battalion. The battalion requires medium- to long-range radio

capability to communicate with their higher headquarters and is frequently augmented with additional high frequency (HF) or satellite systems for redundancy and additional reach.

The RAF concept might call for small teams operating in geographically dispersed locations within the CCDR's area of responsibility to support specific missions. A field artillery battalion will not likely possess the capability or quantity of systems to support such operations. After the unit receives the mission and conducts mission analysis to identify equipment shortfalls, it must be able to submit an ASCC-validated operational needs statement to receive a materiel solution or funding to commercially procure the required equipment. For example, Africa has very limited infrastructure but has developed a relatively robust cell phone capability. If a FA battalion sent three teams to operate under the force protection policy of the embassy, the battalion may be able to provide one high-frequency (HF) radio, leaving two teams without communications. In this case, the battalion should request a cell or satellite phone contract and establish communication architecture to support reporting to the embassy via cell phone and to the ASCC through contracted satellite phone or organic HF systems. Furthermore, the same demands of the RAF concept apply to life support systems like water purification, small solar panels for phone charging, and many other mission enablers. As the RAF concept matures, the Army should leverage lessons learned from actual missions to shape future materiel programming and budgeting, thus minimizing the need for ad-hoc solutions.

Leadership and Education

The preparation, both formal and informal, of leaders at all levels lies at the foundation of the DOTMLPF leadership and education analysis. Moreover, this analysis seeks to fully understand current and potential professional development issues, determine whether the Army has the resources to address any issues, and possibly develop ways to solve them.³² Leader development is a core competency of the Army and the last decade of war has created a generation of capable and adaptive leaders. The RAF concept requires changes to the leader development program that will strengthen mission command principles in both leaders and organizations.

Professional military education (PME) is the cornerstone of any effort to develop culturally and regionally aware fires Soldiers and leaders who are able to operate autonomously and effectively in remote and austere environments. In order to produce a more culturally aware fires leader for regional engagements in an environment that demands mission command, the Army should overhaul the PME curricula, potentially lengthening the amount of time a leader spends in formal schooling.

Outside the formal PME system, there are numerous opportunities to receive education and training that would enhance the effectiveness of fires leaders in a TSC environment. Several U.S. government agencies to include the United States Agency for International Development, Department of State, Peace Corps, Central Intelligence Agency, and Drug Enforcement Agency have training opportunities for their employees prior to overseas utilization tours. Such venues provide opportunities to train select fires personnel in specific, key aspects of regional dynamics prior to a RAF deployment, resulting in better fires leader adaptability and interagency coordination during RAF mission execution.

Formal university education short of a degree is also a possibility. A semester of college is approximately 14 weeks and would qualify for temporary duty (TDY) funds. A fires officer coming out of an operational tour and moving to an ASCC or CCMD staff could attend school TDY *en route* and receive 15-18 credit hours of undergraduate education focused on the history, politics, geography, economics, culture, and human dimension of a specific region. This option entails some expense but provides the leader with substantial awareness and considerable understanding of a region that will shorten integration time and enhance productivity. The Army should screen and select fires leaders in critical billets for this opportunity.

Finally, there are internships at various agencies, both government and private, that operate around the globe. A young fires officer finishing company-level command could spend 1 to 2 years on a service tour with a humanitarian organization and then serve on the regional ASCC staff until attending the Command and General Staff College (CGSC), subsequently returning to a staff position in the division that is aligned with that region. This arrangement would not only enhance the officer's abilities but would also provide agencies (that sometimes view the Department of Defense suspiciously) with a great opportunity to work with some of the Army's best and brightest.

What the Army should not attempt is to create a pseudo-foreign area officer outside the formal FAO process. If the Army accepts the capabilities and limitations of a fires officer and facilitates training to maximize that officer's abilities, it can produce a valuable asset to regional engagements and operations. As previously discussed, the requirement to become proficient in a language is not economical and the damage that can be done with mediocre language skills could prove significant and detrimental when negotiating agreements, contracts, or other complex human engagements. Sensitive negotiations are better left to a professional interpreter who has mastered the nuances of a language and regional dialects. The Army should not lose sight of the goal that Soldiers are regionally aware and not regional experts.

During the FA and ADA officer basic and advanced courses, there must be training on the proper use of the interpreter, studies of anthropology, and how to understand and respect societies. The Army should reach outside its own military doctrine and explore relevant information sources. One such source is the Peace Corps manual *Culture Matters: The Peace Corps Cross-Cultural Workbook*.³³ This book provides a map to guide Peace Corps volunteers through their cross-cultural experiences and has broad applicability. It is well developed, field tested, and exactly what the Army needs. With this training, fires lieutenants and captains could be assigned virtually anywhere without region specific considerations as they would be better prepared to interact and operate in the human dimension of any culture or region.

At the mid-point of an officer's career, perhaps as part of CGSC, the Army should narrow the officer's cultural focus and begin to hone regional expertise. Part of the requirement for this narrowed development falls on assignment managers, who should notify the officers of their next assignment as early as possible. Accordingly, schoolhouse curriculum developers should place regionally-specific courses later in the course to allow the student officers to make the correct regional choice. Whether the officers are going to a FA, ADA, or IIA unit for a key and developmental job or to a division staff, they should know the gaining unit's regional alignment in sufficient time to develop a reasonable understanding of the culture and factors influencing U.S. policy and strategy in that region.

Personnel

Personnel analysis carefully considers the qualifications and availability of personnel to address possible capability gaps in human capital across the force. Personnel also evaluates the Army's ability to place enough qualified and trained personnel in the correct occupational specialties at the right intervals and for the required duration.³⁴ Personnel policies guide the career path of professional Soldiers. Consequently, the Army must update these policies to reflect the emerging realities of the operational environment and requirements associated with the RAF concept.

When General Odierno unveiled the RAF strategy, he specifically addressed the current personnel system and its limitations in supporting the emerging, post-Afghanistan requirements. His intent was that any new personnel management system would "focus units during their training cycle on specific mission profiles and unique environmental characteristics."³⁵ New requirements will necessitate changes to Army personnel policies. According to General Odierno:

First, our Army Force Generation, or ARFORGEN, process has served us well in meeting our demands over the last several years in Iraq and Afghanistan. But with operations in Iraq complete and ongoing transition in Afghanistan, we will have the opportunity to adapt this process to be more wide-ranging, especially as we re-balance toward the Asia-Pacific region.³⁶

From a personnel point of view, changing the duration of the ARFORGEN cycle has been a frequent point of contention, generally tied to the traditional 2-year command tours for battalion and brigade commanders, command sergeants major, and centralized selection list (CSL) positions on division and corps staff. Although the ARFORGEN model is effective, as implemented, it can create a lower demand for commanders and sometimes delays or precludes some otherwise qualified officers from the command opportunities.

Currently, fires units proceed through three phases in their ARFORGEN life-cycles: reset, train, and available. This model usually requires a 3-year rotation of personnel and units typically experience a sharp decline in readiness during the reset period due to a mass exodus of experienced personnel and a rapid influx of replacements. This model served the Army well during the predictable deployments of OIF and OEF but is not adequate for a less predictable global environment and within the RAF concept.

To address these challenges, the Army should establish a goal for manning that would set a standard tour length in a fires unit at 4 years for non-CSL positions and manage a 25 percent annual turn-over rate with a corresponding two percent monthly turn-over rate. This personnel replacement model is congruent with the previously-discussed 2-year decisive action rotation followed by a 2-year RAF mission (2+2). The model of routine inflow of personnel to a unit served the Army well during the pre-9/11 era, caused minimal turmoil to unit readiness, and did not overburden installation support capabilities. The model also created a steady-state condition that allowed the units and the installation to better predict gains and losses and did not require a difficult and expensive personnel surge followed by long periods of low demand for Soldier and family transition services.

If a fires battalion followed the “2+2” model, a company grade leader (NCO or officer) would arrive and spend 4 years in the organization, spanning both a decisive action and RAF rotation, before departing to another unit with required PME en route. For example, a fires battalion would receive a lieutenant straight out of the Basic Officer Leader Course (BOLC) or follow-on schooling at a rate of about one officer every month or two (32 officers authorized for a heavy FA battalion with a 48-month replacement cycle), which provides a relatively modest level of turmoil. This officer would have time to serve in the traditional positions of company fire support officer, platoon leader, and battery executive officer or battalion staff officer before departing for the Captain’s Career Course (CCC). Furthermore, the officer would experience two full rotations (2+2) regardless of where he or she arrives in the model.

This personnel management system is more difficult for the field-grade officers and command sergeants major due to the high demand for key and developmental (KD)-qualified individuals across the force. These fires leaders should continue to serve a maximum of 2 years in a KD position before moving to another. Furthermore, the battalion operations officer, executive officer, commander, and sergeant major should continue to arrive and depart on staggered cycles, have opportunities to serve in various brigade or division positions, then PCS to an appropriate developmental job after achieving KD qualifications.

Changes to the current model of personnel management will require a fundamental shift in how a successful career is viewed. The Army should revise AR 600-3, *The Personnel Development System*, to encourage and protect non-standard career tracks. The Army must also accord additional guidance to career managers and, perhaps most importantly, to selection and promotion boards to ensure officers are rewarded and not punished for pursuing non-traditional assignments in support of the RAF concept. Additionally, the 4-year

model not only extends tour length, preserving PCS dollars for the Army and allowing junior leaders an opportunity to experience the rigors of decisive action training and qualification, but it also provides an opportunity for leaders to fully experience RAF missions, providing optimal value to the GCCs. Finally, the Army should continue to refine and use its “Green Pages,” already proven more effective than existing policies at matching talent with need.³⁷

Facilities

Facilities analysis examines military-owned and other facilities to ensure optimized support of ongoing and anticipated operations and to eliminate capability gaps. Facilities analysis also seeks to expose issues with and offer solutions for base operations and maintenance.³⁸ Although the RAF concept is innovative and creates numerous institutional challenges, current Army infrastructure will still generally support the concept. There are, however, some facilities-related areas within the RAF concept to which the Army should devote greater attention.

A field artillery, air defense, or IIA unit deploying to a nation in support of RAF requires the same host-nation infrastructure that any other unit would require for life support, training, and sustainment. However, the Fires WFF possesses unique technical systems, some of which require expensive and time-consuming training. For example, firing a live shoulder-fired ADA weapon as part of gunner qualification is cost prohibitive to many nations. Fortunately, the Army can mitigate some of these issues.

The Army has made great strides in its live, virtual, and constructive (LVC) training capacity; but the Army must now make this capability available in a deployable package that can support RAF training missions. Mission training facilities that support LVC training must develop a modular component that can be “unplugged” and deployed to support technical skills training in an austere environment. With this in mind, the Fires Center of Excellence must make mobile training systems available to deploying units. A “simulator in a box” that is deployable by C-130 would enable the U.S. trainers to accelerate the FSF training and provide realistic, hands-on experience in a controlled classroom environment. It would also allow U.S. Soldiers to maintain skills proficiency when deployed and while conducting tasks other than their own core competencies. The ADA should procure an easily-deployable and rugged fire direction center (FDC) system and a Stinger simulator while the Field Artillery should do the same for FDC, call-for-fire, and cannon system simulators. Furthermore, and using virtual reality gaming techniques, the ADA should adapt currently non-deployable systems, such as the improved moving target simulator stinger missile trainer, to create smaller, easily portable capabilities.

All of these simulators exist in the Army school-house environment; the challenge is to create a deployable, self-sustaining version and making them available to RAF units in support of their missions. This capability alone could dramatically reduce the cost of FSF training while producing a more highly trained individual in less time.

Installations will also need updated facilities to conduct effective pre-RAF training. The foundation should be the installation education centers, which should serve as the central location for the language, regional expertise, and cultural centers. The Army should invest the resources needed to bring these facilities to a standard equivalent of a modern university to facilitate on-site and distance learning opportunities. Finally, the Army must modify and configure its deployment-related infrastructure to handle a persistent but low-volume deployment cycle yet retain the ability to surge in support of contingency response deployments.

Conclusion

As a first choice resourcing solution for regional challenges,³⁹ the RAF concept recognizes the complexity of the operational environment and offers well-tailored and properly-trained forces to handle a wide variety of tasks and missions in support of CCDR needs. Furthermore, this concept provides the operational adaptability and resiliency required for the range of military operations in a volatile and ambiguous world. The fires WfF core tasks provide the maneuver commander the devastating effects required for decisive action and the flexibility needed across the range of military operations. With the advent of the RAF concept, the fires community again has an opportunity and requirement to demonstrate the outstanding professional contributions to a combatant commander's theater objectives. With a focused analysis and a professional dialogue of doctrine, organization, training, materiel, leadership and education, personnel, and facilities, the fires community can seize the opportunity to shape the operational environment.

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