

ARMY AVIATION IN THE NATIONAL GUARD: ASSESSING FOR EFFICIENCY AND EFFECTIVENESS

BY

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Since the events of 9/11/01, aviation in the Army National Guard has been simultaneously supporting strategic initiatives such as transformation, new equipment fielding, Homeland Defense and Security missions, State Active Duty requests, Counter-Drug Operations, and operations supporting the War on Terrorism (GWOT). This SRP examines Army National Guard Aviation to determine if the force structure can remain balanced as an effective and efficient operational force while maintaining the OPTEMPO in support of GWOT, Homeland Defense/Security, and State Active Duty missions in view of recent changes of the mobilization policy, implementation of the Army Force Generation Model (ARFORGEN), and competing budgets.

ARMY AVIATION IN THE NATIONAL GUARD: ASSESSING FOR EFFICIENCY AND EFFECTIVENESS

The recent changes in the reserve component mobilization policy, combined with the accelerated transition from a strategic reserve to an operational force, have all impacted the readiness of the Army National Guard (ARNG). Since 9/11, Army aviation units in the National Guard have been simultaneously supporting strategic initiatives such as Homeland Defense and Security missions, the Global War on Terrorism (GWOT), and Operation Jump Start (OJS). At the same time, competing programs for transformation and modernization, fielding the new LUH-72 Lakota aircraft, State Active Duty missions, and Counter-Drug Operations (to name a few) have challenged the effectiveness and efficiency of ARNG aviation.

On more than one occasion in 2008, Army Chief of Staff General George W. Casey, Jr. declared “The U.S. Army is out of balance [stretched too thin], and out of balance isn’t hollow, it’s not broken.... We’re running the all-volunteer force at a pace that is not sustainable.” This SRP examines ARNG Aviation to determine if the force structure can remain effective and efficient as an operational force while maintaining General Casey’s “balance” — in view of current and projected ARNG aviation force structure, Army Force Generation Model (ARFORGEN), transformation and modernization programs, operations tempo (OPTEMPO) in support of GWOT, Homeland Defense/Security demands, and competing State Active Duty missions. During the course of this review, recommendations will be offered to assist Department of the Army (DA) and National Guard Bureau (NGB) planners in their goal to maximize balance with efficiency and effectiveness of ARNG aviation.

Background

Department of Defense (DoD) adopted the Total Force Policy in 1973, it was designed to better integrate the active and reserve forces so they could effectively carry out the U.S. National Security Strategy.¹ The use of the reserve component in the Gulf War in the early 1990s provided an opportunity for DoD to validate the ARNG's effectiveness and relevance. But the results were mixed. The Government Accounting Office (GAO) NSIAD-96-130 report on Issues Pertaining to Readiness of the Army National Guard (March 1996) concluded the reserve component had considerable excess combat forces at the same time the Army had a substantial unfilled requirement for combat support units.² In addition, the ability of some ARNG combat brigades to be ready for early deployment missions to support the military strategy was highly uncertain.³ This uncertainty sparked much debate as to whether the roles, missions, and force structure of the ARNG should be reformed.

Two contentious issues were the ARNG's lengthy post-mobilization train-up requirements and the employment of round-out ARNG combat brigades. The underlying reasons for training deficiencies were complex and attributable to long-standing systematic problems.⁴ Several ARNG weaknesses that contributed to an inaccurate picture of units' readiness were identified—older items of equipment used as substitutes for newer items not yet fielded, unqualified personnel assigned to a unit, and different reporting frequencies in the ARNG as opposed to their active duty counterparts.⁵

DoD's 1993 bottom-up review led to the strategic decision to realign combat service support units from the ARNG to the U.S. Army Reserve (USAR) and to move the majority of combat and combat service support units from the USAR to the ARNG.⁶ Between fiscal years 1990 and 2001, the reserve component declined in strength by

more than 20 percent.⁷ This decline contributed to growing ARNG aviation, but it left the USAR with minimal aviation force structure to support additional Army Combatant Commander requirements.

An August 2003 bottom-up review of aviation modernization and transformation led to the capstone aviation plan that, with minor modifications, still serves as the aviation roadmap.⁸ To better align resources with the plan, in February 2004 the Army decided to cancel the Comanche helicopter program, thereby providing \$14 billion required facilitating the transformation.⁹ In addition, citing numerous delays and budget overruns, DA cancelled the Bell Helicopter contract for the Armed Reconnaissance Helicopter (ARH) in the fall of 2008.¹⁰

During this era of persistent conflict, the ARNG has shifted responsibilities from a strategic reserve to an operational force.¹¹ ARNG aviation continues to remain decisively engaged in the war on terror as it continues to transform and modernize its fleet and grow the mission with the addition of Unmanned Aircraft Systems (UAS), Light Utility Helicopter (LUH-72) Lakota, and Joint Cargo Aircraft (C-27J). Amidst all of this turbulence, Army aviation maintains a proud tradition and heritage as summarized by retired Army Vice Chief of Staff and Master Army Aviator, General Richard Cody: “We have the best pilots in the world. We have the best commanders, the best maintenance crews, and the best equipment. Our aviation Soldiers have shown great courage in a tough and demanding fight.”¹²

Force Structure

An explanation of the total Army aviation force structure is necessary to understand ARNG aviation’s complex situation. To enhance total Army readiness, Army

aviation transformed from a dispersed theater, corps, and divisional force structure of small aviation brigades into robust, modular combat aviation brigades (CABs).¹³ Eleven active component (AC) and eight ARNG CABs now fully support all of the Army's Brigade Combat Teams (BCT).¹⁴ These CABs are organized multi-functionally into four categories—Heavy, Medium, Light and Expeditionary. They each have a headquarters and aviation support battalion, differentiated only by the number of assault, general support, cavalry, and/or attack battalions assigned.¹⁵ For six of the Army National Guard divisions, the CAB (Expeditionary) includes a UH-72 Lakota-equipped security and support battalion deployable to non-hostile environments.¹⁶ Recently added, the Theater Aviation Brigade (TAB) force structure resides in the reserve component; the ARNG has four brigade TAB headquarters and USAR has two. The AC “owns” the majority of the remaining Army aviation assets. All force structure, battalion level and below, is comprised of AC, RC, and ARNG components within the CAB's, TAB's and Air Cavalry Squadrons (ACS).

In May 2004, then Major General David Petraeus, Commanding General, 101st Airborne Division (Air Assault) proclaimed, “Aviation assets are absolutely critical to the ground commander's success.”¹⁷ As part of the Army's transformation plan, the 2004 aviation modernization plan shifted more aircraft into the reserve component. Current Army aviation rotary wing force structure assigns 55% of the aviation force to the AC, 40% to the ARNG, and 5% to the USAR. See Figure 1 below for a breakdown of the brigade force structure.¹⁸

Army Aviation Brigade Rotary Wing Force Structure

	COMBAT AVIATION BRIGADE	THEATER AVN TAC/ BRIGADE/ GROUP	ASSAULT	GENERAL SUPPORT AVN BN	AH-64 ATTACK	OH-58/ ARH*	SERVICE & SUPPORT	AVIATION SUPPORT BN	AIR CAVALRY SQUADRON	SPEC OPS AVN REG (SOAR)
HEAVY	6	0	6	6	12	0	0	6	0	0
MEDIUM	6	0	6	6	6	6	0	6	0	0
LIGHT	1	0	1	1	0	2	0	1	0	0
EXPEDITIONARY	6	0	6	6	6	0	6	6	0	0
THEATER AIR CAV REGIMENT	0	8	6	8	0	0	0	4	0	0
SPECIAL OPS	0	0	0	0	0	0	0	0	3	0
	0	0	0	0	0	0	0	0	0	4

Figure 1.

After nearly five years of fighting in both Iraq and Afghanistan, the goal of Army aviation is to increase the number of medium CABs from four to seven.¹⁹ Also, the ARNG is adding six medevac UH-60 equipped companies (12 aircraft each) and six LUH-72 equipped medevac companies (8 aircraft each) to meet current and future demands.²⁰

Secretary of Defense Robert Gates' memorandum released on 24 November 2008, in reference to the report from the Commission on the National Guard and Reserves, the Secretary presented 82 recommendations for further review by DoD. He specifically requested DoD's assessment of the current distribution of Total Force capabilities to identify existing capabilities from all components to fulfill civil support requirements and to rebalance where appropriate in order to respond to domestic emergencies.²¹ The Secretary also recommended a review of a shift in capabilities from the Guard that is not required for its state mission. Currently, the USAR has only 7% of the attack helicopter assets, as compared to the ARNG's with 31% and AC's with 62%. The Secretary's message seems to call for a redistribution of attack aviation assets from

the ARNG to the USAR or AC— because dual state mission support is not a USAR or AC requirement. The risk would then be the ARNG's inability to respond to a homeland defense and/or security mission with attack aviation. However, the ARNG is already limited to eight attack battalions, or 192 AH-64 aircraft nationwide for such response. The growth of medevac aviation force structure, a dual-use asset, in the ARNG supports the Secretary's recommendations.

Late in 2008, DoD also canceled the Armed Reconnaissance Helicopter ARH-70, being fielded as Army aviation's replacement for the aging OH-58 D Kiowa Warrior's in the AC and AH-64A Apache's in the ARNG. The October 2008 decision to cancel the contract with Bell Helicopter came during increased concerns on fiscal spending and was based in part on Bell Helicopters budget overruns and project delays. The decision cited Bell's cost estimates, which ballooned from \$359 million for development to \$942 million and from \$8.56 million per unit to \$14.48 million. Further, deliveries originally scheduled for 2009 had slipped to 2013.²² Both AC and ARNG aviation are now left with a fleet of over-used, combat-worn aircraft, which the ARH was scheduled to replace.²³ The Army will redirect their efforts to sustaining the fleet until a replacement for the ARH can be fielded, taking into account the OPTEMPO of units scheduled to field the replacement aircraft.²⁴ In the meantime, the impact on effectiveness and efficiency of ARNG aviation from the cancellation remains unanswered.

ARFORGEN

In February 2006, HQDA published the Armed Force Generation Model (ARFORGEN), a readiness model in support of the National Military Strategy and the Army's Campaign Plan. ARFORGEN was designed to manage the force to ensure our

military's ability to support demands for Army forces. ARFORGEN is thus the key process on which all funding, training, equipping, and staffing are based. ARNG readiness is a significant ARFORGEN issue.

The ARFORGEN process creates operational readiness cycles wherein individual units increase their readiness over time, achieving full mission readiness and availability to deploy at a predetermined time.²⁵ ARNG staffing, equipping, resourcing, and training processes are synchronized within the ARFORGEN process with the goal being to generate ARNG forces that will support one operational deployment every five years.²⁶ The initial requirement for the reserve component model was one operational deployment every six years. However, current and projected OPTEMPO has decreased the time between deployments.

To achieve the progress required by operational readiness cycles, units are required to transition through three ARFORGEN-defined readiness pools—Reset/Train, Ready, and Available.²⁷ The most anticipated advantage of the ARFORGEN process for ARNG units is its assurance of funding, equipping, and predictability of deployments. ARFORGEN, in theory, is an excellent tool for developing training and predicting mobilizations for the reserve component. However, the model was developed and implemented after the Global War on Terror (GWOT) commenced with Operation Enduring Freedom (OEF) and proceeded to Operation Iraqi Freedom (OIF). These ongoing operations have posed several challenges to the implementation of continuous cycles within the model. Further, the model manages units; it does not consider an individual soldier's prior rotation with another unit, state active duty missions, availability

of equipment, or deployment exemptions guaranteed in the soldier's enlistment contract.

ARNG Aviation force structure is uniquely challenged to execute the cycle as intended for the following reasons:

- ARNG aviation brigade headquarters are not geographically co-located with subordinate ARFORGEN units.
- Prior mobilizations resulted in the aviation brigade headquarters and subordinate units being out of cycle with each other for ARFORGEN training and availability.
- Prior mobilizations of individual soldiers to fill deployment vacancies within other units results in the individual soldier being out of cycle with the ARFORGEN training and availability of their assigned unit.
- ARNG units, under Title 32, have no obligation to their ARFORGEN designated higher headquarters when assigned outside of their respective state.
- ARNG aviation commands have administrative command and control responsibilities assigned to aviation units co-located in their state, regardless of brigade headquarters-designated ARFORGEN force structure.
- ARNG staffing and equipping changes during a five-year span.
- ARFORGEN fails to account for dual state mission requirements.

For the purposes of this discussion, the ARFORGEN command and control relationship requires further clarification. DA and NGB have directed that command and control relationships for units within the force structure coincide with ARFORGEN

planning and considerations. Hereafter, references to subordinate units means the relationship that exists today for mobilization planning of ARFORGEN units.

First, a typical Combat Aviation Brigade (CAB) is comprised of five battalions, each with approximately 2,500 personnel and 116 to 122 helicopters, depending on configuration. Generally, the majority of the 3,000 plus soldiers of an ARNG Brigade Combat Team (BCT) and Fires Brigades are co-located within the borders on their respective state. Unlike ARNG BCT's and Fires Brigades, Aviation Brigade Headquarters are not co-located within the same state as their subordinate units.

Each state and/or territory requires Guard aviation asset availability for state emergency use and homeland security/defense Title 10 and 32 functions. With only eight ARNG CAB's and four ARNG TAB's in the total Army aviation force structure, it is not possible to assign an entire aviation brigade to each state. Each state government depends on Guard aviation assets, so it is unrealistic and infeasible for an entire ARNG Aviation Brigade to be located in one state.

To satisfy the need for aviation assets among the fifty states and territories, aviation brigade subordinate units are assigned to multiple states. Typically, an aviation battalion is divided among three to four states all the way down to the company and detachment levels. Multiply that times the five battalions in a brigade: The result is a brigade's ARFORGEN organization disperses subordinate units over fifteen to twenty different states. For example, the 77th TAB, headquartered in North Little Rock, Arkansas, is composed of five battalions further dispersed among 23 states and territories.²⁸

Complicating the situation even further is the dispersal of aviation aircraft maintenance support. Aviation force structure allocates each brigade an aviation support battalion (ASB) to perform the majority of the unit and intermediate level maintenance. But after a battalion of aircraft is distributed among multiple states, a typical aviation maintenance company becomes further divided into as many as three to four detachment size units supporting a flight company and/or detachment (5-10 aircraft) within their respective state. Army aviation is a highly expensive and frequently used resource that consumes a large portion of the states' National Guard budgets. But aviation detachments employ few personnel. Aviation is an expensive asset, and ARNG fiscal planners are more inclined to pay for personnel (end strength) than aircraft and its maintenance.

Second, ARNG aviation brigade headquarters are not on the same ARFORGEN mobilization cycle as their subordinate units. When the President declared the "war on terror" in 2001, force planners did not anticipate that seven years later the nation would still be at war on two fronts. To support staffing requirements for aviation units beginning in the 1990's and extending to OIF, OEF, and KFOR, the "plug-and-play" concept has broken the ARNG force structure relationships of the CAB/TAB's with their subordinate units. Forces Command (FORSCOM) planners did not mobilize ARNG CAB and TAB headquarters; instead, they mobilized only battalion level and below ARNG force structure to meet the modular AC aviation brigade and task force requirements.

The practice of mobilizing ARNG battalion level and below force structure and attaching to an active duty CAB or Task Force continued until March of 2006. This

arrangement put the mobilization cycle out of sync for the brigade headquarters and subordinate units. As a result, from 2001 to 2006, ARNG aviation units mobilized without consideration of designated ARNG brigade force structure. Five years later, Active Duty CABs deploying at a one-year home to one-year deployed ratio could no longer sustain the pace and meet all requirements. So FORSCOM planners required the ARNG CAB/TABs headquarters to deploy as an entire brigade.

In the spring of 2006 in support of the OIF 06-08 rotation, the 36th CAB Texas ARNG became the first ARNG CAB deployed in support of the GWOT. Due to dwell time restrictions of 36th CAB subordinate units and personnel—required by the mobilization policy in effect at the time— replacement units and individual fillers from over 44 states were transferred to the 36th CAB to meet staffing and mission requirements.²⁹ Of the five battalions mobilized with the 36th CAB, only two— the 1-149th Attack (ATK) and 449th Aviation Support Battalion (ASB)—were part of the 36th CAB force structure that existed prior to mobilization. Three battalions (1-131 Assault [ASLT], 1-108th Assault [ASLT], and 2-135th General Support Aviation Battalion [GSAB]) along with C Company 1-111 Med (AA), an additional medevac company, were cross-leveled to fill voids in the 36th CAB force structure created from previous mobilizations with other units.³⁰ The practice of mobilizing units outside their ARFORGEN force structure has contributed to this endless cycle of “robbing Peter to pay Paul.” The system will remain out of synch as long as ARNG aviation rotations continue at the 1-year deployed to the reduced 3 year cycle.³¹ Considering all the challenges and recent changes to the mobilization policy, and on a positive note, NGB aviation planners have managed to

keep Brigade Headquarters and their Aviation Support Battalions assigned to the same state and on the same ARFORGEN mobilization cycle.

Third, to peel the onion even further, numerous individual soldiers are being cross-leveled from one unit to fill a mobilization vacancy in another. Compounding the issue, many of these otherwise qualified soldiers are filling positions outside of their military occupational specialty (MOS). Speaking to the ARNG Senior Leadership Conference in January 2009, Army Chief of Staff General Casey indicated the ARNG might need to increase its end strength to provide “relief” from the cross-leveling that is required of so many units.³² For example, the 39th Infantry BCT Arkansas ARNG, tapped in 2008 for its second OIF rotation in four years, had numerous vacancies; therefore a decision was made to cross-level all Arkansas ARNG soldiers with more than 24-months dwell time regardless of MOS.³³ Because the 39th IBCT’s second rotation was a force protection mission, this mission allowed immaterial or otherwise non-military occupational specialty qualified (MOSQ) soldiers to fill the infantry unit vacancies.

Everything comes with a price. For example, to meet the needs of the 39th IBCT deployment in 2008, the 77th Theater Aviation Brigade (TAB) Arkansas ARNG provided 160 plus aviation MOSQ soldiers to fill vacancies for the deployment. During the time the 39th IBCT was deployed, the 77th TAB Headquarters along with four additional Arkansas ARNG aviation units received official notification of sourcing for future mobilizations. And under the current mobilization policy, a soldier is eligible to mobilize again with his primary unit, without regard to dwell time as is the case for those soldiers

cross-leveled to deploy with another unit.³⁴ As we have noted, ARFORGEN is designed for units, not for individual soldiers.

Deploying entire units does not influence the balance as much as the never-ending cycle of individuals being cross-leveled from one unit to the next. The ARFORGEN process does not consider units that are “broken” to fill other units’ deployment requirements. The quality of the losing unit’s training during the time the unit is “broke” is significantly degraded. At times, some ARNG units have seemed no more than casual Individual Ready Reserve (IRR) holding units. This practice has obvious impacts on the availability of qualified soldiers to deploy and perform their aviation MOS, rather than an IBCT force protection mission. The 77th TAB must now fill vacancies created because of cross-leveling aviation soldiers for the IBCT mission or redeploy soldiers with less than 24 months dwell time; the key difference is the 77th TAB vacancies require the soldier to be qualified in the respective aviation MOSs.

Fourth, under Title 32, ARNG CAB and/or TAB subordinate units have no obligation to comply with their ARFORGEN “out-of-state” higher headquarters requirements or specified training guidance. Under Title 32, the adjutant general (TAG) directs training for the ARNG units within their respective states. Since a CAB and/or TAB headquarters is not co-located with all of their subordinate units, only after units are mobilized under Title 10 do these units come under the command and control of their ARFORGEN aviation higher headquarters. Competing requirements—such as specified state training, support, and funding requirements—preclude collective training with ARFORGEN assigned units outside of the state prior to mobilization. When

requested by the out-of-state higher headquarters, subordinate ARNG aviation units, as a courtesy, may provide unit status reports (USR) and other requested unit information.

Implementing the ARFORGEN model for ARNG aviation brigade and battalion size units is simply not realistic due to prescribed collective training requirements. Training programmed to occur beginning year three of the five-year ARFORGEN model is unlikely to be carried out because units do not have full command and control of their subordinate force structure.

Figure 2 below represents the ARFORGEN training model for a typical ARNG Aviation Brigade using the one-through-five year operational deployment cycle.³⁵

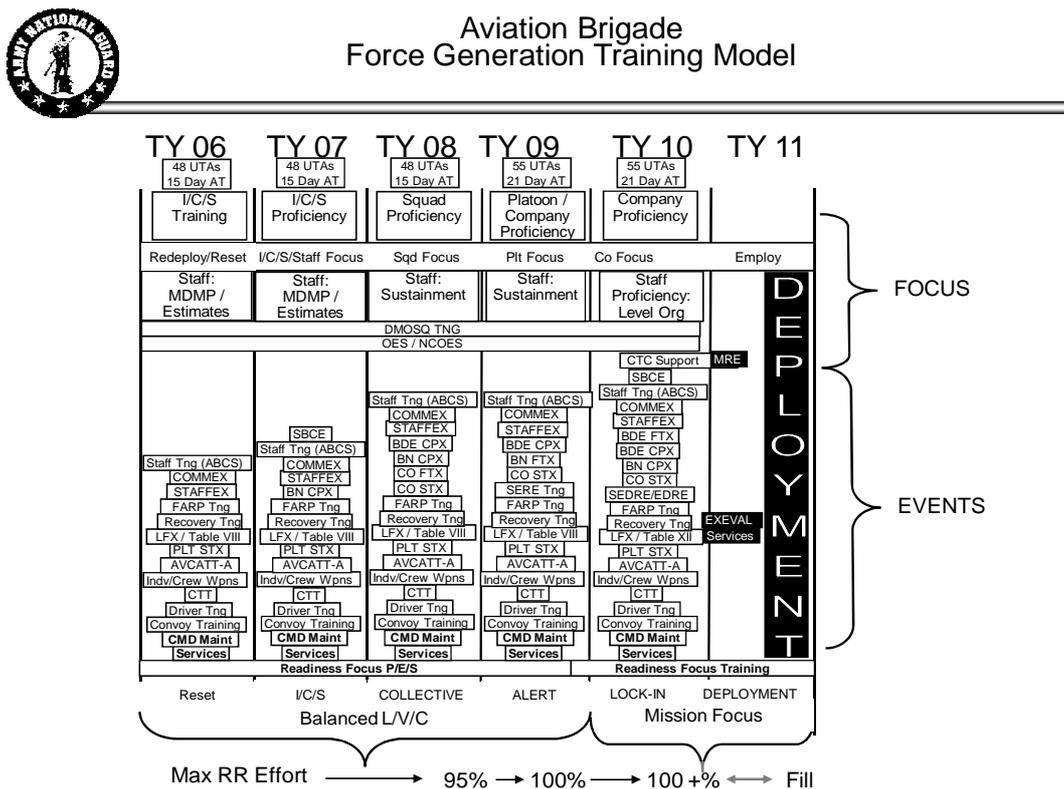


Figure 2

Under the ARFORGEN plan, school training days for new equipment training (NET) and professional military education are in addition to the respective allotment of ARFORGEN training days. ARNG aviation units must prioritize training based on the “fly-fix-fly” concept of MOS proficiency; this prioritized training delays portions of the Theater-Specific Individual Readiness Training (TSIRT) and non-MOS specific activities to post-mobilization. When a unit is deploying with their organic aircraft, they are typically loaded for shipment a minimum of thirty days prior to personnel movement, which allows ample time for the aviation soldier to complete the most current TSIRT for his area of operation. All first-line leaders and above must protect valuable MOS training time and must push back on administrative time “robbers” that do not sustain or improve the soldiers’ MOS proficiency.

Fifth, ARNG aviation units have administrative command and control responsibilities for other aviation units assigned within their state, regardless of their ARFORGEN designated force structure. As a rule, the highest aviation organization within a state functions as the state’s aviation higher headquarters for subordinate aviation units. When a state has an assigned aviation brigade headquarters, the command and control state relationship remains within the aviation community. In the absence of an assigned aviation brigade headquarters, the command and control relationships for aviation units vary. The prevailing trend is to assign the aviation unit under the command and control of the all-purpose Troop Command Brigade for the given state. The State Army Aviation Officer (SAAO) on the Joint Forces Headquarters Staff is a pivotal staff position for states without aviation brigade representation; the

SAAO may at times assume additional duties and responsibilities since he is generally the senior aviation representative for the state.

The 77th TAB from the AR ARNG exemplifies the state command and control relationship. Within the Arkansas ARNG, the 77th TAB provides command and control higher headquarters for two aviation battalions, the 777th Aviation Support Battalion (ASB) and 1-114th Security and Support Battalion (S&S). The 777th ASB is ARFORGEN assigned to the 77th TAB but the 777th ASB ARFORGEN units are dispersed among five states. The headquarters element of the ASB is the only ARFORGEN unit assigned to the 777th ASB within Arkansas. The 1-114th S&S, designated for homeland defense and security missions, is ARFORGEN aligned with the 36th CAB Texas ARNG; but for state command and control, the unit reports to the 77th TAB. 1-114th S&S ARFORGEN units co-located in Arkansas include the headquarters and Alpha company (-). The remaining ARFORGEN units are dispersed among four states and one territory.

Additionally, state command and control requirements are assigned for other aviation companies and detachments assigned to the Arkansas ARNG and are not in the ARFORGEN force structure. None of the eleven company or detachment aviation units (consisting of air assault, medevac, air traffic services, aviation intermediate maintenance, and aviation support services), are assigned to the 77th TAB or 777th ASB ARFORGEN force structure.³⁶ Such complex command and control relationships are not unique to the Arkansas ARNG.

Figure 3 below depicts the 77th TAB in state command and control force structure and Figure 4 depicts the ARFORGEN assigned command and control force structure.³⁷

State Command and Control Force Structure

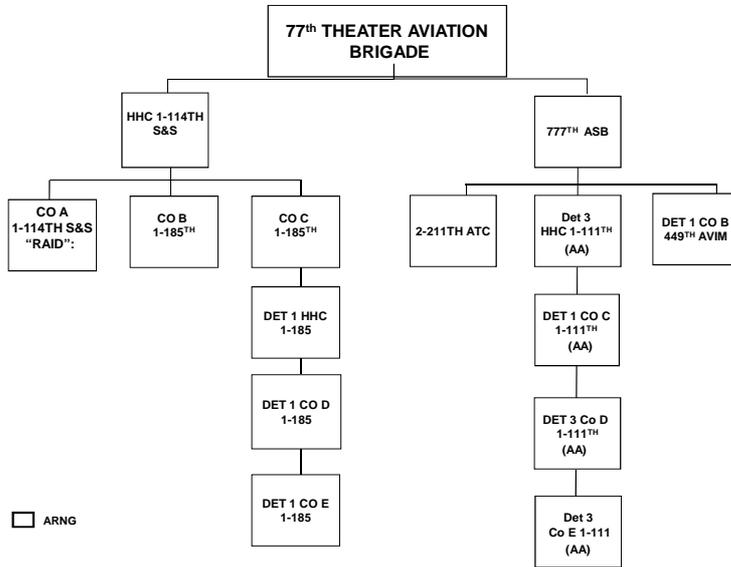


Figure 3

ARFORGEN Assigned Command and Control Force Structure

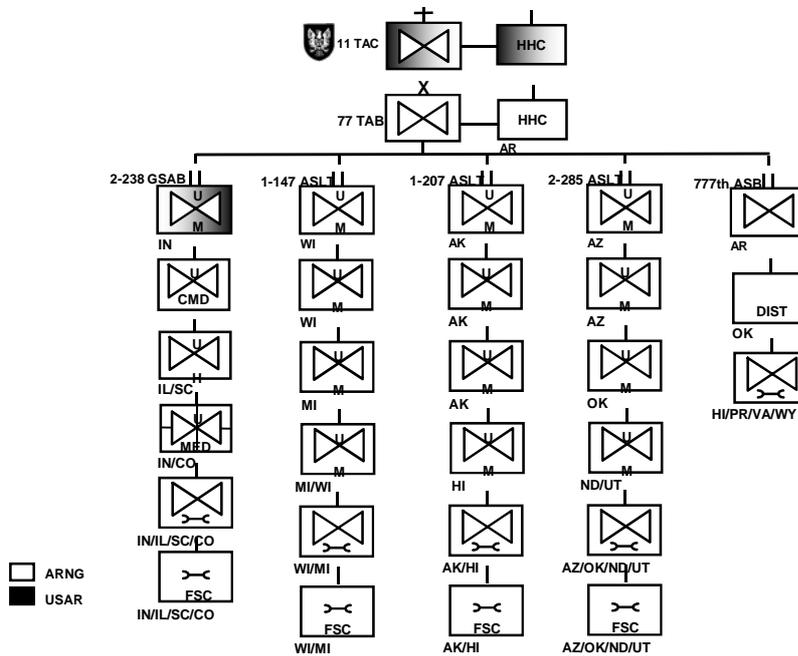


Figure 4

There are numerous challenges associated with command and control requirements for the in-state organization and the out of state ARFORGEN organization. However, the most significant challenge remains with the ARFORGEN training management cycle. ARNG aviation units, regardless of size, plan and conduct training based on their year within the cycle. The complexity of synchronizing multiple aviation units on different years of the cycle within a state command and control relationship, combined with the challenge of tracking and monitoring designated ARFORGEN training requirements for out-of-state units, creates inefficiencies contributing to the overall decreased effectiveness of the ARNG unit and unrealistic requirements for the “part-time” citizen-soldier. As previously stated, FORSCOM planners never envisioned the country would be at war on two fronts seven years later when aviation units were mobilized without assigned battalion or brigade headquarters.

Sixth, ARNG units undergo staffing and equipping changes during a five-year span. This is true of all units, regardless of mission. The ARFORGEN model is based on the assumption that the personnel status of a unit and individual remains fixed throughout the five-year cycle. Specifically, it does not consider promotions, transfers, reassignments, new accessions, pre-basic training soldiers, competing missions with state active duty, or any other personal demand placed on the citizen soldier. The AC has recently adopted a change to their personnel system as a "bridging mechanism" necessary to support the rotation cycles. The Army Force Generation-Focused Manning Model launched in September 2009 requires manning actions to directly align with a brigade's reset-train-deploy timeline.³⁸

The ARNG does not have a system to compensate for reduced readiness for programmed ARFORGEN training time starting when a new recruit is sworn-in to completion of advanced individual training (AIT). Unlike an AC unit, the reserve component must recruit, train, and equip for each individual for a vacancy in the unit. When a new recruit enlists into the ARNG, he is immediately assigned a paragraph and line number within the unit. The new recruit then counts toward the overall readiness rating on the USR, regardless of the recruit's training and qualifications. To compensate for new recruits, wounded warrior and other non-available soldiers, the AC and USAR personnel reporting systems instituted the Trainees, Transients, Holders and Students (TTHS) account.³⁹ The TTHS account increases unit readiness by removing non-deployable soldiers from Troop Program Unit (TPU) force structure positions. Depending on the RC enlistment contract, many new recruits may drill with their unit up to a year before attending basic training. Many high school or college students enlist under the split-option contract, which allows the recruit to complete basic training during the first summer of their enlistment and then to return to school in the fall. AIT is completed during the second summer of the enlistment, between school years. Depending on the length of the AIT and the type of enlistment contract, it can take more than two years to get these soldiers qualified; all the while, the soldier is occupying a position within the unit. The USR has reporting codes accounting for these unqualified soldiers; nonetheless, their status does not change the ARFORGEN cycle of a unit's availability for deployment.

In addition, starting with initial enlistment to completion of AIT, the unqualified soldier is required to attend drill. Many states have adopted some version of a "Warrior

Training” program to counter pre-basic pipeline enlistment losses for recruits that fail to report for basic training. These programs vary, but in essence, they consolidate the new recruits from all the units within the assigned brigade or geographic area in order to prepare them for transition to the military and basic training by providing instruction in drill and ceremony, military bearing, customs and courtesy and physical conditioning. Although the outcomes of these programs vary, overall they have made a positive difference. Once again, time spent in this training is not accounted for in the ARFORGEN model. The AC and RC TTHS personnel accounting system and AC process of submitting personnel staffing request and receiving a trained soldier in return is more amenable to the ARFORGEN model.

In any unit promotions, transfers, reassignments, and civilian job transfers—all contribute to the staffing turmoil. Based on a continuous five-year training plan, the ARFORGEN model is not realistic for the RC without duplication of training and other redundancies each time a soldier’s personnel status changes. Unit trainers have adapted to these changes; however, current First Army policy requires all pre-mobilization training to be validated no earlier than twelve months prior to the mobilization date. As a result, soldiers must repeat pre-mobilization training conducted prior to the twelve-month validation requirement. Many aviation trainers believe this training time should be utilized for MOS-specific training, leaving the basic soldier mobilization tasks to the twelve months prior to mobilization and post-mobilization. This is not to imply that aviation soldiers will never train on basic soldier tasks, quite the contrary. Commanders and first-line leaders always have the prerogative to put this training on the schedule, and any NCO worth his or her salt has hip-pocket training

ready to deliver when the opportunity arises. Being subject to a one-size fits all approach to pre- and post-mobilization training limits the flexibility of trainers, who prior to ARFORGEN directed training, exercised discretion to determine which tasks were best suited for pre- and post-mobilization. Obviously, the routines and capabilities of mobilization stations are challenged when each unit requires designates different post-mobilization soldier training.

Seventh, ARFORGEN is an example of systematic failure to recognize and acknowledge dual-state mission requirements. In addition to the previously mentioned competing demands for training time, ARNG aviators may be tasked to perform unique missions requiring special skills. ARFORGEN does not account for the dual-mission requirements of state active duty. Unique to the ARNG is the requirement to respond for state active duty in support of natural disasters, homeland defense, and homeland security. The period of response can vary from one day to years, as was the case for Operation Jump Start (OJS), the patrol mission along the southern border of the United States and Mexico. In most cases, state active duty requests are not for entire units. Instead, a specific number of soldiers is requested to perform either MOS and/or non-MOS functions— such as filling sand bags in response to a flood, delivering water and supplies to tornado victims, supporting the presidential inauguration, and so on. When soldiers are performing state active duty, they are still assigned to their unit. Depending on the duration of the orders, these soldiers may miss drill weekends and be unavailable to participate in the scheduled ARFORGEN training activities.

For example, on more than one occasion during a drill weekend in 2008, the Arkansas ARNG responded to state disaster relief requests because of tornado

damage. Some aircraft delivered supplies; another supported the Governor; ground vehicles transported water and tarps; others provided security to prevent looting of severely damaged neighborhoods. All unit training scheduled for that weekend was interrupted or postponed because of the unplanned state disaster duty.

ARNG helicopters are also commonly used to fight forest fires. Aviation crewmembers undergo specialized training in the use of the Bambi bucket, a unique external load task, not considered mission essential under the warfighting aircrew training program. However, training time and resources must be allocated to ensure trained crews are proficient in the fire-fighting task when the need arises. Training time for specialized tasks such as this is not allocated in the ARFORGEN cycle.

OPTEMPO

Current OPTEMPO rotations for ARNG units is 3-to-1 year ratio, with approximately 1.5 CAB's deployed per rotation as reported by NGB aviation planners.⁴⁰ Low density high demand ARNG force structure such as medevac, maintenance, and air traffic services are driving down the overall Guard aviation OPTEMPO ratio. DA's goal of 1-to-5 years for ARNG is not possible when the AC aviation counterparts are deploying at a 1-to-1 year ratio and demands for aviation are rising for OEF.

Since 2006, the 36th CAB, 34th CAB, and 28th CAB along with the 449th TAB have been mobilized in support of OIF. This does not include additional battalion and/or company level units deploying for OIF, OEF and other missions, such as Kosovo and Bosnia. Additional brigades and units have been sourced for deployment; however, this information has not been released to the public at the time of this writing. The ARFORGEN planning cycle notifies aviation units 24-month in advance, which has

made a critical difference in managing the OPTEMPO. For every unit currently deployed, there are two preparing to go because of the 12-month mobilization policy limitations. The current ARNG aviation OPTEMPO of (2) CAB's, (1) TAB, and (1) Aviation Classification Repair Activity Depot (AVCRAD) supporting OIF along with a Battalion(-) mission in Kosovo has become predictable and therefore manageable for planners.

Discussions of OPTEMPO should include the issue of availability of personnel. More than anything else, people affect the balance of the effectiveness and efficiency of ARNG aviation. Individual soldier vacancies, or "passbacks" as they are commonly referred, continue to challenge ARNG aviation. When a state cannot fill the soldier vacancy from within, the procedure is to pass the vacancy back to NGB. NGB will then post the vacancy Guard wide on the "GKO passbacks" website in an attempt to find a volunteer.⁴¹ For low-density MOS passbacks such as an aviation flight surgeon, NGB will resort to the master database of qualified and available ARNG soldiers and then task a state to fill the vacancy, much like the IRR system conscripts critical personnel.

For sourcing requirements from June 2007 to August 2009, more than 2500 passbacks were requested by various ARNG units. But 357(or 14%) of the total came from the aviation 15 series MOS.⁴² Aviation passbacks were the highest of all branches; immaterial MOS passbacks were second at 347 (or 14%), and infantry 11 series was third 266 (or 11% of the total).⁴³ A further review of the aviation passbacks revealed 31% were UH-60 pilots, 29% Warrant Officers (WO) and 29% were Non-Commissioned Officers (NCO) in the grade of E-5 and higher. As of this writing, 137 aviation passbacks

remain unfilled for the 28th CAB.⁴⁴ Clearly, aviation units are critically short of qualified WOs and NCOs while they are challenged by the current OPTEMPO.

During the 1990s, it was common for individual ARNG aviation units to receive each year one to two qualified WOs and NCOs coming off active duty. Today, that trend has stopped. Referring once again to the 77th TAB AR ARNG, in the past 5 years, only one Warrant Officer has transferred from the AC to the 77th. Ironically, after spending one year in the Guard, the officer transferred back to the AC. During his exit interview, the WO remarked that life on active duty was easier than in the Guard. The WO noted that Guard aviation deployments added stress on his family, so taking care of his family was easier while on AC.⁴⁵ Lack of AC aviation soldiers transitioning to the Guard, Vietnam veteran WOs retiring from the Guard, and wars in Iraq and Afghanistan— all of these factors contribute to the OPTEMPO challenge of maintaining the balance for effectiveness and efficiency in ARNG aviation.

Presently, over 50% of the assigned warrant officers in the ARNG are eligible for retirement.⁴⁶ Regardless of OPTEMPO, competing missions, transformation and modernization, and other issues, this fact will not change. If the ARNG does not increase accessions to the WO ranks and retain eligible WOs for continued service, the effectiveness and efficiency of the ARNG aviation force structure at large will be severely disabled. Currently there are no bonus incentives authorized for RC aviation warrant officers. However, AC WOs are eligible for four current bonus programs, which provide annual bonuses of \$12K to \$25K for an additional three years of service.⁴⁷

Competing Missions and Requirements

ARNG aviation currently has 32 Reconnaissance Air Interdiction Detachments (RAID) in support of the State Counter Drug Operations (CDOPS). These detachments, consisting of two to four OH-58 aircraft each, in some cases dual-utilize aircraft belonging to the Security & Support (S&S) battalion. Aviation soldiers assigned to the RAID are full-time “employees” on continuous 365-day active duty for special work (ADSW) orders. These soldiers are also assigned to a position within an ARNG aviation unit. Some states have elected to assign all of the RAID soldiers to the state headquarters rather than to aviation units due to the competing mission requirements and availability of the soldiers. The CDOPS season operates full-steam during the spring and summer months, coinciding with the planting and harvesting of illegal crops. The timeline presents a conflict for both the individual soldier and his drilling unit—as well as for his CDOPS coordinator— because most ARNG annual training periods are conducted during the summer months. Soldiers assigned to positions within a unit and on full-time orders with the RAID must find a balance for competing demands. Ultimately, both organizations suffer due to the unavailability of the soldiers during overlapping periods of duty.

In addition, the competition for aircraft among the S&S units and the RAID units varies by state. Eventually, the OH-58 aircraft will be turned in as the new LUH aircraft are fielded in the S&S units. Until then, ARNG aviation facilities will continue to maintain both airframes. In response to these competing requirements, some ARNG units have elected to retain OH-58 aircraft for the RAID mission and utilize the new LUH aircraft only for S&S unit missions, as the MS ARNG currently does.⁴⁸ This plan will work until the OH-58 aircraft are required to turn-in. Reducing competition for aircraft among the

S&S units and the RAID mission is an obvious rationale for maintaining both airframes, regardless of other consequences of maintaining two different airframes. However, due to the maintenance status of the OH-58's, some ARNG aviation units may have no choice except to "retire" the OH-58 and once again dual-utilize the new LUH S&S aircraft in the full-time RAID mission.

Adding to intricacies of balancing effectiveness and efficiency is the challenge of new equipment training (NET) for the S&S unit. During the LUH fielding process, each unit fielding is authorized a set number of initial training seats for its aviators and maintainers. The fielding S&S unit does not get additional training seats for RAID personnel assigned to CDOPS who are not assigned to the S&S unit. Then giving up seats for the RAID crewmembers prolongs the units' transition to the new aircraft. The state aviation officer is a pivotal player negotiations with NGB to obtain additional training seats, otherwise not included in the NET fielding package.

Located in each state is an Army Aviation Support Facility (AASF) that operates throughout the week for the purpose of training, maintaining, and supporting the ARNG aircraft. As required by AR 95-1, aviation personnel in the ARNG complete the same flight hours and training requirements as their AC counterparts. ARNG personnel schedule training time during the week and on off-drill weekends with the support of the AASF. The AASF's are staffed predominately by full-time military technicians, most of whom are also members of the aviation units (full-time military technicians must be ARNG soldiers). The AASF employees are not allocated aviation training quotas for military schools such as instructor pilot, maintenance test pilot. Therefore, when an AASF technician has a training requirement, his training counts against his ARNG unit's

quota. In many cases, the employees' technician job at the AASF is compatible with their position in the aviation unit, but not always. So the AASF trains their technicians to perform an aviation job during the week, then the Guard unit trains the same person with other skills for their weekend Guard position.

The Army's Aviation Reset program continues to gain efficiency. The average reset time for a UH-60 is now 84 days.⁴⁹ The issue for the ARNG aircraft is not the program itself but the rate at which ARNG aircraft must be scheduled for reset following deployment. The phased flow of aircraft to the reset locations is staggered over the 12-month span following the deployment. Active duty aviation units are deploying at less than a 1:1 ratio and must receive reset priority. However, delays in ARNG aircraft resets degrades training, readiness, and aircraft availability—adding to the competing challenges of state response capability and ARFORGEN requirements.

Recommendations

Selective policy changes and timely, predictable resourcing of current and future aviation requirements is necessary to sustain, prepare, reset, and transform Army aviation for the future.⁵⁰ The ultimate goal of most policy-makers is an effective and efficient multi-use force structured and equipped to perform some balance of missions among the requirements for Homeland Defense, Homeland Security, GWOT and other Title 10 deployments, and peacekeeping operations. To ensure achievement of this complex goal, the following policies are recommended:

First, realign the S&S Battalions independently under their respective states' aviation force structure. The S&S LUH aircraft are the primary resource and principal aviation asset for state emergency response requests. As such, it is not advisable to

align the S&S units' under a CAB if the units are not co-located within the same state. The S&S battalion organizations should remain intact, since the subordinate units are assigned on the basis of their geographic locations throughout the country. Consider this example: the 1-114th S&S is assigned to the 36th CAB TX ARNG under ARFORGEN; however, the 77th TAB located in Arkansas functions as the brigade higher headquarters, providing daily command and control of the 1-114th S&S. In September 2008, 1-114th S&S responded to a state EMAC request from Louisiana in support of Hurricane Gustav Operations in Baton Rouge, LA. All interstate planning and coordination was managed through the 77th TAB, ARNG Emergency Response Center, and Louisiana State Aviation Officer. The 36th CAB headquarters has no command authority over the 1-114th S&S when under Title 32; however, the 77th TAB has this authority because of state designated command and control responsibilities. Accordingly, the recommendation is to realign all S&S Battalions within their respective state command and control structure. If an aviation brigade exists within the state, such as the case of the 29th CAB MD ARNG, keep the S&S under the CAB. However, in the case of the 1-114th S&S, reassign the unit to the state of Arkansas and ultimately to the 77th TAB, thereby eliminating pointless relationships with a parent organization located in another state. As the number of S&S LUH aircraft in the inventory increases, use of non-S&S aircraft, specifically the UH-60, for state emergency response should correspondingly decrease.

Second, with the exception of aviation brigade headquarters and their assigned aviation support battalions, eliminate all ARNG ARFORGEN aviation force structure relationships. Aviation planners will then be free to initiate a plug-and-play system

without consideration of a brigade headquarters relationship. In reality, NGB aviation has adopted the plug-and-play process out of necessity to support the GWOT requirements. So bringing the system into reality will not present significant changes—call it like it is. For example, under current practices, DoD submits a requirement to NGB for ARNG aviation sourcing. Upon receipt of the request, NGB aviation will review the current dwell time and USR of all assigned ARNG aviation units, then assign and source the most available unit for the mission. This has been a highly effective practice, constraint with the modularity concept of the Total Force, but it is not consistent with DA force structure organization.

Third, establish ARNG policy to discontinue the practice of cross-leveling to support other unit's deployments and "breaking" otherwise proficient ARNG units. Recommend DA and NGB planners to maximize the use of IRR soldiers, especially when filling low-density specialties or immaterial MOS passback vacancies. And adopt the AC and USAR TTHS personnel reporting system for soldiers not available to deploy. This eliminates the false perception of unit readiness based on end-strength. Otherwise, authorize funding for excess strength to compensate for cross-leveling necessary to fill vacancies for mobilizing ARNG units.

Fourth, DA should assess the training, staffing, and equipping shortfalls identified with regard to RAID and operation of the AASF. Simultaneous operations and support requirements necessary to fulfill state requirements and full-time aviation support create training and staffing shortfalls within the system, detracting from ARNG aviation's ability to carry out simultaneous operations.

Fifth, offer the same bonus programs to ARNG Aviation Warrant Officers as those currently available to their AC counterparts. As previously identified in the OPTEMPO section of this paper, critical aviation vacancies reside in the WO ranks. With over 50% of the assigned ARNG WOs eligible for retirement, retention is of the upmost importance. Financial incentives in the form of bonuses, is an avenue worth pursuing.

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