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Marine Corps University
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MASTER OF MILITARY STUDIES

THE FUTURE OF THE AIR NATIONAL GUARD AND ITS F-16 FIGHTER MISSION

SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF MILITARY STUDIES

**MAJOR JOHN WHEELER
WISCONSIN AIR NATIONAL GUARD**


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Mentor and Oral Defense Committee Member: **Dr. Bradford A. Wineman**

Approved: 

Date: 4 May 2015

Oral Defense Committee Member: **Dr. Paul D. Gelpi**

Approved: 

Date: 4 May 2015

Executive Summary

Title: The Future of the Air National Guard and Its F-16 Fighter Mission

Author: Major John M. Wheeler, Wisconsin Air National Guard

Thesis: Given the U.S. NSS priorities and the ANG's role in Homeland Security, it is in the Nation's best interest to make alert mission Guard units a priority to receive the F-35.

Discussion: One of the largest problems facing the Air National Guard (ANG) and the USAF today is an aging fleet of aircraft. In reviewing the F-16 program in particular, the U.S Air Force (USAF) has little to no money in its budget for replacements. The Air Force cut a short-term modernization solution for older F-16's (CAPES). With no concrete solution proposed by the Air Force or National Guard Bureau, Fighter Wing unit leadership is left wondering about their unit's future as they are forced to wait for the arrival of the F-35. Currently, there are too many unknowns in the Air Force fighter community for the ANG to get an accurate picture of its fighter future. In the meantime, the Air Guard must also consider its other Homeland Security missions and prepare for all the possible scenarios. The Air Force and National Guard Bureau may need to consider mission changes for Fighter Wing units. Some possibilities are changing fighter units to unmanned aerial vehicle units, cyber defense units, or a Homeland Defense Hubs. Additionally, combining Air Guard bases into a single location could be a long-range cost saving solution to budgetary shortfalls.

Conclusion: The "legacy" F-16 aircraft leaves the Air National Guard's fighter community facing a difficult future. The fate of the ANG F-16 is in the hands of the Air Force, which has limited capabilities due to budget constraints. Complicating the issue further is the severely delayed and over-budget F-35 program (the F-16 replacement). Given the current circumstances the F-16 and its replacement, the Air Force can decide to continue the CAPES program, not fund the CAPES program allowing for a fighter aircraft capability gap until new aircraft can be acquired, transition fighter units to UAV, cyber, or homeland security missions, or establish a combined basing program in an attempt to offset the expense of the F-35. Going forward, the Air Force, Air National Guard, and Air Force Reserve must be more effective in long-range planning and DOD must take a more hands on approach to modernization programs like the F-35.

DISCLAIMER

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Acknowledgments

The impetus for this research project came from my passion for the mission of the Air National Guard and the multifaceted capabilities it provides the nation and my concern for what I believe to be a significant risk to the United States Homeland Defense. Initially, I explored other options for ANG units who may be forced out of flying F-16's. Next, my research led me to ask why ANG units are the last in line for the latest fighters, when Air National Guard F-16 units provide a significant majority of aerospace defense. Then, I explored the need for an F-35 fighter. Finally, I looked at possible solutions that would not only fit into the Air Force budget, but meet the needs of the U.S. National Security Strategy.

There were a few people who help make the completion of this project possible. I would like to thank Dr. Wineman for taking me as a mentee. I appreciate his patience while I struggled to find my way through this process, his thoroughness and rigor in reviewing my work, and his timely feedback over the last several months.

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INTRODUCTION

One of the largest problems facing the Air National Guard (ANG) and the United States Air Force (USAF) today is an aging fleet of aircraft. This paper discusses the aging F-16 Falcon, in particular. The Department of Defense (DOD) is dealing with budget shortfalls that will affect replacement aircraft for the Guard, Reserves, and Active Duty. This predicament is requiring the Active Duty Air Force, Air Force Reserve, and the Air National Guard to piece together a mission ready fleet of F-16's that has a short life expectancy. Throughout the OPERATION ENDURING FREEDOM (OEF) and OPERATION IRAQI FREEDOM (OIF) campaigns, the USAF, and its components were able to perform the given missions with measurable success. However, future strategic planning cannot ignore the potential threats of Chinese and Russian military forces. These military powers present a threat that requires a robust fighter aircraft such as a modernized F-16, the F-22, or the F-35 Joint Strike Fighter.

Any solution to the Air Force fighter aircraft situation will require funding. For the ANG to see the necessary dollars, Congress has to be convinced investing in the future Air Guard is a value for the taxpayer, and a need exists for the ANG to maintain fighter missions. The Air National Guard has political (state and federal) and USAF policy elements working in its favor. Those elements are, state representation in Congress, the coalition of Governor's (Council of Governors), and the USAF's Total Force Concept.

During the April 2014 testimony before the Senate Armed Services Committee, the National Commission on the Structure of the Air Force (NCSAF) Chairman, Dennis McCarthy had this to say, "It has been very helpful to gain insight from the Secretary and the Chief of Staff on their current thinking about our proposals regarding integration of the total force. They seem ready to move towards a rebalanced force that meets challenging budget realities through a further focus on the cost-effective options inherent in the Air Force Reserve and Air National

Guard.”¹ The NCSAF sentiment voiced by Mr. McCarthy, leads one to believe the Air National Guard could see increased funding in future budgets. However, the fact remains, U.S. military budgets are shrinking as a whole. So, it is more likely Air Guard funding will not decrease at best.

The ANG is cost effective, and it demonstrated the ability to handle a substantial operational burden since 9/11. Nonetheless, the next generation fighter aircraft (F-35) distribution plan has Air Guard Fighter Wings second on the priority list, behind their active duty counterparts. Given the U.S. National Security Strategy (NSS) priorities and the ANG’s role in Homeland Security, it is in the Nation’s best interest to make alert mission Guard units a priority to receive the F-35. Over the last 14 years, the Air Force has had a high deployment tempo. The ANG contributed 17% of the total Air Force personnel deployed.² During this period, the Air Guard has been tasked with providing 33% of the fighter aircraft capability with 22% of the Air Force end strength (see Appendix A). Keeping the current budget situation and NSS in mind, it would be fiscally and strategically irresponsible for Congress, the DOD and the USAF not to support the ANG’s need for modernization of fighter aircraft.

In a 2011 interview with the National Defense Magazine, Chief of the National Guard, General Craig R. McKinley said, “The Air National Guard is flying some of the oldest equipment that is in the inventory.” He went on to further explain, “When you deem something ‘legacy’ in this fiscally challenged environment, it means it’s at risk.” The ANG had 153 F-16’s retired, transferred, or lost in combat from 2001 to 2011. The F-16 program is in danger of being dropped from the Air Force altogether, because of the airframe’s “legacy” status. Delays in production of the much maligned F-35 Joint Strike Fighter (JSF), has left the Air Force and its components without an F-16 replacement. The Air Force has decided to fund a short-term fix Service Life Extension Program (SLEP) for the F-16. Several Air Guard units have the older

model Block 30 F-16 not covered by SLEP. General McKinley voiced his concern, “just because of the age of our fleet, some people might discard our Air Guard as out-of-date and incapable of being recapitalized.”³ The precarious state of the F-35 JSF program is cause for concern. The next generation fighter has had issues ranging from faulty tires, leaky engines, and pilot helmet malfunctions. Most recently an engine fire on June 23, 2014 grounded all Air Force and Navy F-35’s for three weeks.⁴ The Air Force cannot transfer its F-16 Block 40’s, and 50’s over to the ANG until they are replaced by F-35’s. However, some ANG F-16 Block 30 models are in better shape than the Block 40’s and 50’s have, because of less stress to the airframe or fewer hours flown.⁵ The Block 30 lifespan is predicted to run out in the early to mid-2030’s.⁶ With an uncertain budgetary future, the Air Force and the National Guard Bureau must plan for multiple courses of action concerning the future of the fighter mission.

Brig. Gen. Jeffrey R. Johnson concurred by saying, “If those (meaning newer model F-16’s) trickle down to us, or if F-35’s come to us early in the F-35 production, we’re okay. But, if they don’t trickle down and we don’t get in on the F-35 program early on, now we have concern over our force structure.” Air Guard units with air sovereignty missions need to update the current inventory or get new aircraft in ten to fifteen years (possibly earlier), depending on that F-16 model’s remaining life.⁷ The need for newer F-16’s is now more critical due to the Air Force decision to drop Combat Avionics Programmed Extension Suite (CAPES) from its current budget.⁸ In a letter to the Secretary of the Air Force (SECAF) dated February 12, 2015, the House Armed Services Committee reiterated the importance of CAPES to the aging F-16, “radars and avionic suites on these aging airframes require upgrades in order to adequately intercept ever-increasing threats.”⁹ If the Air Force follows through on the House Armed Services Committee request and reverses its decision not to fund the upgrades, Air National

Guard, and its F-16 bases would breathe a big sigh of relief. The fiscal restraints facing the Air Force will undoubtedly make changing that decision questionable at best.

Currently, there are far too many unknowns in the Air Force fighter community for the ANG to get an accurate picture of its fighter future. In the meantime, the Air Guard must also consider its other Homeland Security missions and prepare for all possible scenarios.¹⁰ The ANG's present-day Domestic Operations (DOMOPS) posture establishes itself as a flexible force with multiple capabilities to bring to both the federal and state mission. When the ANG took on this newer role, it demonstrated to Congress and DOD that the Air Guard can diversify its mission sets with a cost effective end.

There are a few methods the ANG can use to diversify. Unmanned Aerial Vehicles (UAV's), better known as Drones, are already being flown by Air National Guard units and have rapidly become a versatile and reliable Air Force asset. With cyber threats on the rise, a need for more cyber defense infrastructure and manning is a top national security priority. The Air National Guard could help fill this void. The Air Force and ANG have drastic needs for modernization. However, shrinking budgets have stymied the timely process of procuring new and updating existing equipment. As a cost saving measure, the ANG could develop a Joint Basing program in states where it is deemed strategically, operationally, and financially sound. Another means of diversifying the ANG is to centralize DOMOPS capabilities in each Federal Emergency Management Agency (FEMA) Region on one base in that region. These bases would work in concert with the Department of Homeland Security (DHS), and would be a hub for manmade and non-manmade emergency response across the U.S.

ROLES OF THE AIR NATIONAL GUARD

On September 11, 2001 Massachusetts Air Guard F-15 Eagle fighter jets were the first to respond to the hijacking of American Airlines Flight 11 and United Airlines Flight 175. Also,

North Dakota Air Guard F-16 Falcon fighters were first in the air in Washington D.C.¹¹ Since 2001, the National Guard has become an essential military force in the Global War On Terrorism (GWOT) and OIF. The National Guard has also deployed to the U.S.-Mexican border in support of Operation Jump Start (OJS). The Guard was tasked to provide the interdiction of illegal aliens crossing the border into the U.S., according to a 2008 Congressional Research Service (CRS) Report.¹² The report also states the Guard has always been a factor in U.S. combat power, but after 2001 the U.S. has had to rely on the Guard more often for combat operations. The Air National Guard's role in emergency relief support and counterdrug operations is the cornerstone of its mission sets. However, after 9/11 the Air National Guard has been both a domestic state-level security force and a vital component of U.S. combat power for overseas operations.

The Air National Guard's federal mission requires it to be ready to deploy rapidly. In some cases, units must mobilize within 72 hours. When not deployed, each ANG unit is assigned to an Air Force major command, which ensures those units are mobilization ready for humanitarian and contingency operations. In March 2015, there were an estimated 10,300 Air National Guardsmen federally activated.¹³ ANG units are also responsible for a state mission. Those responsibilities are to protect the life and property of residents and to preserve peace, order, and public safety. The Air Guard accomplishes these tasks by providing emergency relief support during natural disasters such as floods, earthquakes, and forest fires. Additionally, the ANG is capable of search and rescue operations, support to civil defense authorities, maintenance of vital public services, and counterdrug operations.¹⁴ The state mission of an Air Guard unit is expandable, and the success of the mission requires a diverse array of capabilities.

The future of the USAF and the Air National Guard will be manipulated by budget concerns, which clouds any certain path to modernization. Budget issues have not prevented Governors and commanding Generals from working together to preserve the fighter mission in

those states. An Adjutant General who has an F-16 unit under his command understands the importance of maintaining the fighter mission. They also realize the benefits of working together to achieve fighter aircraft modernization goals. Adjutant General unity, as well as the previously mentioned Council of Governors, has applied pressure on Congress to support the Air National Guard's future.¹⁵ Russell Rumbaugh points out in his 2013 article:

More than 100 years later, Congress remains committed to maintaining that allegiance of the Guard because it is good politically. Although the active Air Force is more than three times larger than the Air National Guard, the active force is geographically consolidated, with 40 percent stationed in just six states. In contrast, all senators and most House members have Guard members as constituents, with no state having more than 5.3 percent of Guard personnel. Each Guard unit represents a cohesive network that reaches out to family and friends, creating a powerful voting bloc.¹⁶

Having state representation in Congress, the National Governor's Association backing, and a united group of TAG's offers the ANG a formidable political coalition to push its modernization agenda. More importantly, modernization must be considered across the entire Air Force to keep in line with the Total Force Concept. Each USAF component is being counted on to provide its piece to U.S. national defense.

As for now, Air Guard Fighter Wing's futures are uncertain as they, along with active duty Air Force, wait to see how the production and procurement process of the F-35 JSF play out. A strangled budget could change the course of F-35 JSF procurement. The 1700 plus jets currently in the planning process could shrink to a lower amount if funding comes up short. If proper funding is unavailable, ANG units like the 115th would most likely have to make do with their current F-16 platforms. If future budgets become even more restricted, bases like Truax Field in Madison could be forced into transitioning to a new mission.¹⁷ Or, if Congress chooses to close bases, as was done in 2005, ANG bases could be affected. Closing any base tends to cause political upheaval most government leaders strive to avoid. For example, the financial impact of closing the 115th Fighter Wing in Madison, WI could be a loss of over \$100 million to

the local economy annually.¹⁸ A local population will feel that kind of economic loss and it will get the attention of the Governor and other civic leaders.

THE POLITICAL FIGHT

Internal and external politics play key roles in Department of Defense budgetary decisions. The external political battle heated up in 2012, when the Air Force released its budget proposal, which asked the Air National Guard to take the majority of the planned cuts. The ANG and the State Commanders-In-Chief's (Governors) took serious issue with the proposed manpower cuts and what that meant for the end strength of their units. At the end of 2011, the USAF had 65% of the end strength, while the ANG had 21%, and the USAFR had 14%.¹⁹ But, the 2012 budget proposal asked the USAF to take 39% of the personnel cuts, the ANG 52%, and the USAFR 9%.²⁰ Although, those cuts may seem unequal or even unfair, the budget must first take into account strategic, operational, and tactical needs. The Air Force thought its proposal met those needs, but the Governors and Adjutant Generals did not share that sentiment. In fact, the political pressure applied by the states forced the Secretary of Defense to review and make changes to the budget in the Air Guard's favor. National Guard installations not only inject money into local economies, they also provide a capability and resource for state and local governments to utilize in times of need. For these reasons, governors are passionate about the strengthening of the National Guard and wish to see more federal tax dollars spent on Guard initiatives, not less.

However, military spending on Guard bases is not always viewed as a positive by the local population. In the case of Burlington, Vermont, the U.S. Air Force is being sued by a coalition of residents in Vermont, who say the decision to base new F-35 fighters out of a local airport will be a nuisance and a potential safety risk.²¹ Burlington residents are not the only ones unhappy with the selection of its Air National Guard base as an F-35 JSF installation. A *New*

York Times article says that Air Force scoring chart actually had Burlington ranked third (behind #1 Jacksonville, FL and #2 McEntire Joint National Guard Base in South Carolina) among the Guard bases vying for the F-35, not first as Air Force officials had originally stated.²²

There is growing sentiment that the Burlington choice was political rather than a strategic or operational consideration. An April 2013 *Boston Globe* article on the awarding of the F-35 to the “Green Mountain Boys” was cast in a shadow of conspiracy. The Air Force’s environmental study was thought to be incomplete as it did not account for the noise generated by the F-35 JSF and the effect it would have on the population surrounding Burlington International Airport. Issues like the faulty environmental study have raised questions about the legitimacy of the Burlington selection and whether it was a political payback to an influential member of the Senate Armed Services Committee.²³ The article goes on to quote an unnamed Pentagon official as saying, “the lengthy base-selection process was deliberately “fudged” by military brass so that Leahy’s (U.S. Senator on Senate Armed Services Committee) home state would win.”²⁴ The evidence of political gamesmanship in the Burlington selection may be compelling, but there were other reasons for the Air Force's decision. For example, Burlington has old F-16's, and Jacksonville has remodeled F-15's. Moreover, Burlington’s proximity to major U.S. cities that have economic and or political significance (i.e. Boston, New York, Philadelphia, and Washington D.C.) was also a significant factor in the selection process.²⁵

THE DILEMMA OF AGING FIGHTER AIRCRAFT

The problem of what to do about the ANG aging fleet of F-16's is complicated, but two critical issues stand out in the process to find solutions. One, the life expectancy of each F-16's physical structure must be determined (time left until an aircraft is sent to the Air Force aircraft demobilization facility in Tucson, Arizona). And two, a determination must be made on the capabilities an F-16 will require to survive potential future threats. The Air Force has developed

technologies to help answer these questions and find solutions that fit into near-term (10-15 years) needs. The hope is these solutions will fill the gap between now and when the new F-35 JSF is readily available.

A program called the Aircraft Ground Vibration Test Instrumentation System (AGVTIS) is run by The Structural Vibration Branch of the Air Force Wright Aeronautical Laboratories at Wright-Patterson Air Force Base (AFB) in Dayton, Ohio tests the structural life of an airframe.²⁶ At the *Flight Dynamics Laboratory* at Wright Patterson AFB, technicians attach the AGVTIS to the nose, tail, and wings of the F-16. The AGVTIS essentially “shakes” the airframe until failures are detected. The test results give aeronautical engineers two important pieces of information. One, it shows how many hours that particular F-16 model can fly before it is unsafe. And two, the sensors placed on the aircraft during the test coupled with a thorough study of the compromised jet indicate structural weaknesses in the airframe. The test allows engineers to make an accurate prediction of how many hours that model has left, and where maintenance teams can make structural improvements to increase the airframe strength and reliability.²⁷ The F-16 SLEP will not only increase the life of the Block 40 and 50 aircraft, it allows the production of F-35’s to catch up to the demand for newer airframes. The development of SLEP is significant, because the F-35 JSF is not predicted to replace all F-16’s in the Air Force inventory until sometime around 2040. And, future budgeting could impact that timeline and push it back even further.²⁸

The Air Force now knows how long it can fly its various models of the F-16, but it has not completely solved the issue of survivability of future threats. Major General James Martin, Deputy Air Force Secretary for Budget, admitted to the need for modernization, “As our fleet continues to get older and smaller, we know that potential adversaries are investing in new technology and updating their inventories.”²⁹ Even though the Air Force realizes the F-16 fleet’s

current radar and electronic warfare systems make the fighter vulnerable to future threats, budget constraints have forced a decision away from upgrading. CAPES will upgrade the nose-mounted radar, electronic warfare controller and center pedestal display, as well as install an integrated communications module into the F-16. The CAPES upgrade would permit the F-16 Fighter to be capable of threat survival well into the future. More importantly CAPES would allow the F-16 to be a viable warfighter until the F-35 JSF takes over the Air Force inventory. But, instead of spending the \$2.8 billion on CAPES, the 2015 Air Force Budget moved that money into the F-35 program.³⁰ Meanwhile, the Air Force, and, in particular, the Air National Guard are left with fighters that are rapidly becoming vulnerable to potential advisories.

Paying for a 14-year war, poor long-range planning, and an over budget F-35 JSF program that has failed to have proper DOD oversight is to blame for the F-16 modernization predicament.³¹ In his 2009 statement to the House Armed Services Committee Subcommittee on Air and Land Forces, Former Director of the Air National Guard, Lieutenant General Harry Wyatt, deftly summed up the severity of the situation:

We need solutions for what we in the Air National Guard refer to as the “mid-term gap,” and for long-term recapitalization. If the USAF sacrifices the mid-term, it risks uncovering a critical line of defense. Continued investment in weapons development ensures the USAF maintains an operational edge for coming generations. Everything has to be on the table. This infrastructure of equipment is not just fighters; it includes tankers, air traffic control, command and control, security, and communications—the entire system supporting and protecting our nation’s last line of defense.³²

The importance of the Air National Guard’s F-16 role in national defense is highlighted by the Aerospace Control Alert (ACA) mission. The ACA mission provides alert fighter aircraft that can respond to an airborne threat at a moment’s notice and is operational 24/7. Prior to 9/11, the Air Force was planning to reduce the number of alert sites to four. Since the September 2001 terrorist attack in New York and Washington D.C., the USAF has quadrupled that number of ACA bases to sixteen. Of the 16 ACA missions, 14 are taken by Air Guard units. Furthermore,

75% of all these critical homeland defense missions are flown by units with aging F-16's.

According to Director Jerry J. Walsh Director, Office of the Assistant Secretary of Defense for Homeland Defense and Americas' Security Affairs, "the threat spectrum to our homeland defense is growing because our adversaries are developing new and varying methods to attack the U.S."³³ When threats are on the rise, cutting money from F-16 modernization does not seem to fit the NSS priority of defending the homeland. Especially, when the F-16 is the lifeblood of a vital mission set (like ACA) designed to defend precious U.S. airspace.

CASE STUDY - 115TH FIGHTER WING

In 2012, the National Guard Association examined the numbers behind what the Air National Guard provides the U.S. taxpayer. It found the ANG provided 22% of the Air Force's total personnel and 35% of Air Force fighter capability for 6% of the cost. Those numbers may look impressive, but in reality they are slightly hollow.³⁴ The 35% of the fighter, tanker, and airlift capability is made up of an aging fleet of aircraft, which is a systemic problem Air Force-wide.³⁵ A good example is the ANG's 115th Fighter Wing (FW) in Madison, WI and its F-16 Block 30's. The Block 30's are the oldest fighter aircraft in the Air Force inventory. These aircraft are set to retire no later than 2030.

Right now, the largest concern for the Wing Commander, Colonel Jeffrey Wiegand, is to ensure the unit has a viable fighter airframe that will fill the gap until the next generation fighter (F-35 JSF) is available. When asked what the future holds for the 115th FW flying mission, Colonel Wiegand said, "most likely the Air Force will modernize the current F-16 Block 30's, which will get us out to 2030. By then, the Wing should receive the newer Block 50 aircraft from the active duty Air Force inventory."³⁶ Or, if the Air Force chooses the 115th during the next round of ANG F-35 base selections, the unit could have the JSF by the mid-2020's.³⁷ Of course, with budget cuts possible the 115th FW could end up transitioning to a different flying mission,

an unmanned aerial vehicle (UAV) mission, or a non-flying mission altogether (ex. Cyber). That was the case with the 132nd FW in Des Moines, Iowa. Air Force leadership decided it was in the best interest of the overall mission to have the 132nd convert to UAV's.³⁸ The 115th FW has put in the time and energy to become a pillar of the Madison community. There is a cohesive relationship between government leaders, business leaders, non-profit organizations, and Wing leadership.³⁹ Therefore, a possible transition to the F-35 is not likely to have the negative public perception seen in Burlington, Vermont.⁴⁰

However, there is an Air Force program that may give Madison and other ANG Fighter Wing participants a better chance of obtaining new aircraft more quickly. According to *Citizen Airman Magazine*, "In an active associate unit, the Reserve owns the airframe, while the active force provides aircrews and maintainers who share the responsibility for flying and maintaining the planes. This setup differs from the Reserve's traditional associate unit program, in which reservists operate and maintain aircraft owned by the active duty."⁴¹ Air Guard units who take part in this program are not only investing in their future, they are fully buying into the Total Force concept the Air Force is marketing as its best way to conduct its warfighting business going forward.⁴²

The 115th FW is beginning to implement the transition towards becoming an Active Associate base. In an interview with Chief Master Sergeant Chris Lemke (115th Security Forces Squadron Manager) he said, "the first support element showed up the first week in January (2015) and the Commander and a Senior NCO will be here in February. Active duty personnel will take the place of guardsmen on our manning document. In total it will be 44 positions. The guardsmen are not being let go, but instead transitioned out through a much more friendly attrition process."⁴³ The 115th Fighter Wing has embraced its new role in the Air Force new organizational model of "Total Force" rather than trying to fight it. Active Associate bases are

essential for keeping the Air Force end strength at an acceptable level and simultaneously helping to grow continuity between the active and reserve force. Only time will tell if being an Active Associate base accelerates the process for 115th Fighter Wing in obtaining newer F-16's or conversion to the F-35.⁴⁴ However, it is only natural to assume if the Air Force attaches its active duty men and women to a Guard unit there is a sense of commitment to that base.

AIR FORCE BUDGET CONSIDERATIONS

The Air Force dedication to the Total Force concept is strengthened by the DOD forecast of funding the modernization of fighter aircraft and development of the next generation of fighters. In doing so, the 2015 Defense Budgets Overview lays out initiatives to support funding that goes beyond F-16 modernization and production of the F-35.⁴⁵ The DOD reaffirms its commitment to those efforts in the 2016 Defense Budget Overview.⁴⁶ This budget plan seems to bode well for the Air Force fighter community, however spending on fighter production and modernization will mean cutbacks to manning and other equipment programs. Two other spending initiatives targeted by the DOD that will affect the Air National Guard, are Cyberspace and Intelligence, Surveillance, and Reconnaissance (ISR).⁴⁷

The 2014 Quadrennial Defense Review (QDR) message is the U.S. needs to rely more on National Guard capabilities, not less. Outlined in the QDR are three pillars, which emphasize the DOD's defense strategy. The first pillar relates directly to those intrinsic National Guard capabilities, when it says, "Protection of the homeland will also include sustaining capabilities to assist U.S. civil authorities in protecting U.S. airspace, shores, and borders, and in responding effectively to domestic man-made and natural disasters (2014 QDR)."⁴⁸ By saying the U.S. will perform these tasks, in essence, the QDR is talking about the National Guard. Secretary of the Air Force Deborah Lee James also believes the future Guard and Reserve will be given more responsibility.⁴⁹ The Pentagon priorities clearly indicated there is a future relevancy for Air

Force fighter aircraft as well as cyberspace and ISR or UAV programs that will have a great impact on the ANG going forward. These priorities further emphasize the importance of the Air Force and Reserve leadership working together on future budgets.

OPTIONS FOR THE AIR NATIONAL GUARD

There are currently many unknowns going forward for the Air Force and the Air National Guard. One certainty, it is in both political parties best interest to continue working together to find common sense solutions to the difficult problems and decisions that lay ahead. The unclear timetable of the F-35 JSF has caused USAF and ANG leadership to rethink near and long-term planning. The original estimate touted the F-35 would be operational by 2012, but that was pushed back to the summer of 2015. A 2014 GAO report says the July 2015 timeline may not be possible due to problems completing software testing.⁵⁰ There will be tough choices to be made and some Air Guard units are going to find that change will be staring them in the face. Most Guard fighter units have had that mission for many years. Therefore, change may be a difficult proposition. However, change does not have to be a negative experience. The 132nd Fighter Wing was able to handle the transition from fighters to UAV with positive attitudes. "Most of our airmen have quickly moved from the, 'Oh, I wish I could just fly or work on the F-16's forever' to, 'Hey these are missions that are going to be around for a long time. They're giving me some skills that I know I'm going to be able to really contribute to the defense of our country and state in a way that I never would have been able to have done in the old mission,'" said Colonel Kevin Heer, Vice Commander of the Des Moines, Iowa unit.⁵¹ UAV's are just one possible mission change for ANG units.

Cyber defense is another option for units that are forced out of the flying missions. The National Guard Bureau's J6 (Cyber) Chief, Colonel David Collins thinks, "The Guard is arguably better suited for cyberwar than for physical war. It takes weeks to months to mobilize,

train, and prepare Guard forces for deployment overseas, potentially up to 110 days for the largest and most complex units. A Guard cybersecurity expert could (almost) roll out of bed, log on and start defending networks around the planet before his coffee gets cold.”⁵² According to Collins, the U.S. Government has a long way to go in being prepared on the cyber front. He went on further saying, “The National Cyber Incident Response Plan, in my opinion, is not very thorough....I don’t mind going on record as the J-6 of the National Guard Bureau saying that the nation has a lot of progress that it needs to make.”⁵³ Keeping in line with this sentiment, the Air National Guard would not only be a good fit for this mission, but it may have units being asked to transition out of the flying missions and into cyber defense.

A solution that has been discussed during the BRAC process is the idea of combined Guard basing.⁵⁴ Most states have more than one Air National Guard base within their borders with the possibility of combining those units onto one installation. In fact, there are fourteen states that have three or more ANG bases. However, combining Guard units onto one installation will only work if that base has enough land to accommodate the coexisting units. The Wisconsin Air National Guard is in a good position to combine its installations into a mega base. Volk Field is home to the 128th Air Control Squadron and the Combat Readiness Training Center (CRTC). With over 800 acres of usable land and great potential for further expansion, Volk Field would be an ideal candidate for an Air Guard mega base.⁵⁵ The other tenants would be the 128th Air Refueling Wing from Milwaukee and the 115th Fighter Wing from Madison. The disadvantage to a mega base is the tremendous upfront cost of closing Mitchell and Truax Fields (in Milwaukee and Madison respectively). Furthermore, the expense to build up the facilities and infrastructure capable of handling the two new tenants would be high. The advantage would be the long-term savings; and, only having to support one installation instead of three would free up more space in the budget for modernization. The main problem facing the Air Force fighter

community is, the F-16 (its primary fighter aircraft) is considered a “legacy” airframe and the growing cost of its replacement (the F-35). Using the cost savings from a BRAC solution would allow the Air Force to inject more money into the JSF and replace the F-16 more rapidly than the current timeline.

Another option could be a Homeland Defense Hub (HDH). The idea behind this concept is to convert an ANG base into a Domestic Operations hub that could partner with the DHS. There are ten FEMA regions in the United States and its territories. Air Guard units from seventeen states help make up the Chemical Environment Response Force Package (CERFP) teams in each of the ten regions.⁵⁶ Ten additional states have Air Guard units that are part of Homeland Reaction Force (HRF) units. The core of each HRF is the Chemical Biological Radiological Nuclear and high-yield Explosive (CBRNE) capability, similar to that found in the existing 17 CERFPs. However, HRFs will also have substantial command and control and security capability.⁵⁷ Therefore, one-third of the 88 U.S. Air National Guard Wings have a role in this critical homeland defense mission.

These capabilities can only increase the political capital of the Air Guard, as the United States military struggles through a period of downsizing and reorganization. The rise of natural disaster occurrences and a constant terrorist threat have increased the need for a ready reaction force to deal with these types of a homeland crisis. Until recently, the Army National Guard (ARNG) has been at the forefront of this vital domestic mission. But, the Air National Guard (ANG) is now becoming more involved in the increasingly important assignment of DOMOPS.⁵⁸ The approach of expanding capabilities in a period of economic and mission uncertainty can benefit the ANG in proving its worth to those in office and the American taxpayer.

Each FEMA region could have an HDH. All HDH bases would have capabilities to deal with cyber-attacks, natural disasters, search and rescue, maintenance of vital public services,

civil defense support, explosive ordnance disposal (EOD) support, and counterdrug operations. Each HDH would also have specialty missions. For example, FEMA Region IV, V, VI, and VII are more likely to see tornados and Region IX is susceptible to earthquakes.⁵⁹ Those HDH's would specialize in recovery of those specific disasters. Many ANG installations already have an equipment base that can be used in efforts required of homeland defense. One concern with conversion is the upfront cost involved. Any base conversion courses of action will involve a change or buildup of infrastructure. Modification to a base's infrastructure is usually a costly undertaking.

RECOMMENDATIONS – HOMELAND SECURITY FOCUS

There are four options for the Air Force and National Guard Bureau to consider. First, continue the CAPES program with the aim of providing the ANG with mission effective fighter aircraft at a lower cost than buying new. Decision makers must realize this is a short-term fix for a long-term problem. Second, stay with the current decision and not fund the CAPES program, allowing for a fighter aircraft capability gap until newer F-16's or F-35's can trickle down from other units. Third, transition fighter units to UAV, cyber, or homeland security missions where needed. Widespread mission changes will cause a significant gap in air superiority and the air sovereignty capability. Last, establish a combined basing program in states with multiple Guard bases. The initial cost for combined basing will be significant. However, the long-term savings would allow for increased budgeting for modernization programs, such as the F-35.

In the NSS from 2010, there are four enduring principles which guide U.S. strategy. First and foremost, the NSS seeks to provide, "the security of the United States, its citizens, and U.S. allies and partners."⁶⁰ Lying directly within security is defense of the homeland. This belief is reiterated in the 2015 NSS which says, "Our military will remain ready to deter and defeat threats to the homeland, including against missile, cyber, and terrorist attacks, while mitigating

the effects of potential attacks and natural disasters.”⁶¹ Since the September 11th attacks, the Air National Guard has been given a large piece of the responsibility for the homeland defense mission. As pointed out by Lieutenant General Wyatt, 14 of the 16 ACA mission are flown by Air Guard units. The ACA program is the DOD’s best deterrent against another 9/11 type air attack being carried out. The ANG is in an ideal position to perform the ACA mission. Additionally, as General Wyatt mentioned, the Air Guard dual-hatted role makes it “cost effective.” Location plays an even greater role in what units are selected to provide protection in the skies. There are a total of 27 ANG bases that have fighter capability to handle the ACA mission.⁶² Having so many location choices to stand up an Alert mission makes the ANG a viable resource for the nation’s aerospace threat deterrence capability.

Therefore, the Air Force should place the 14 Air Guard plus the two active duty ACA mission tasked fighter wings at the top of the list (in order of need, meaning oldest Aircraft are highest priority) to receive the F-35 Joint Strike Fighter. The Air Force should upgrade the rest of the ANG fighter wings to newer F-16’s where possible. If there are any units that do not return to a flying mission once their F-16’s are decommissioned, they should be transitioned to unmanned flying wings or non-flying missions (where deemed appropriate). This could present an opportunity for the ANG to make some additional cuts in its force structure that until now may not have been politically possible. If the Air Force can strategically eliminate an ANG base in this process, now is the time. If an ANG base has its fighter aircraft retired and there is no pressing operational need for that base, then it should be closed. Some Air Guard bases will get the new F-35, some will receive newer F-16’s, and some may get neither. The Air Force should make these difficult decisions based on strategic and operational needs, as well as budgetary constraints, not political quid pro quo.

As previously stated, the Air National Guard has an abundance of bases. Fourteen states have three or more installations. Four states have five separate Air Guard bases (California, New York, Ohio, and Texas). Combining bases would not only make financial sense, but logistically the Air Guard could house more capability in the same location. A mega Guard base could be considered the equivalent of an active duty joint base. Joint basing works for the active duty installations. Therefore, the same configuration could benefit the Guard. Private industry uses company mergers frequently as a cost savings measure. Air Guard mega bases would have the same budgetary impact, especially in the case of states that have three or more bases to consolidate. Even though states would likely contest any attempt to merge Guard bases, the Air Force comes out ahead both financially and strategically. The long-term gain in savings outweighs the short-term cost of infrastructure buildup.

CONCLUSIONS

Today's Air National Guard is facing several tough challenges, especially in its F-16 community. Governors and TAG's with fighter wings in their state will certainly be lobbying for the latest aircraft. The money, prestige, and political clout tied to the F-35, is undoubtedly attractive to state military leadership. Most ANG fighter bases expecting to be selected to fly the newest generation of fighter aircraft (F-35 Joint Strike Fighter), will not see them until approximately 2035. Burlington is projected to get its fleet of F-35's around 2020.⁶³ Air Guard units in line for the new plane will see a trickle effect lasting until 2037 or longer.⁶⁴ Most ANG F-16 units do not have the service life left to hold out 15-20 more years. The Air Force and the ANG must work together to put a contingency plan in place for the lagging F-35 production and budgetary shortfalls they are facing. The planning and procurement experience has been a major wake-up call for Air Force and Air Guard leadership. "Going forward, the F-35 program still faces considerable challenges and risks. Ensuring that the F-35 is affordable and can be bought in

the quantities and time required by the warfighter will be a paramount concern to the Congress and DOD (GAO 2013).”⁶⁵ The Air Force, Air Guard, and USAFR must be better at forecasting and planning for future requirements.

The ANG has to be concerned with budget issues and the dual mission it has been given. The matter is complicated even further because each mission has a different Commander-In-Chief, but is paid for from the same funding source. The Guard has its DOMOPS state mission pulling in one direction and it has a federal war-fighting mission pulling in the other direction. Both the state and federal missions are arguably of equal importance, but in today’s economic environment, competition for funding will cause tough decisions to be made. A prime example of the ANG dual tasking is the ACA mission. ACA pilots are in state Title 32 status while they are on the ground, but as soon as they take off on an alert launch they are on Title 10 federal status flying as part of OPERATION NOBLE EAGLE.⁶⁶ The ANG’s ability to successfully carry out both state and federal missions is an accepted part of the Total Force concept. Guard units are being asked by the Air Force to go a step further and become associate bases (units). Being an associate unit means a stronger likelihood of longevity for an ANG base. Active duty Airmen on a Guard base conveys the message that the ANG unit embraces commitment to the Air Force and the Total Force concept.

There will be some tough adoptions forced upon ANG bases over the next few years. Those units, who truly embrace the Total Force concept, will be better equipped to handle the change as it takes place. Whether it is switching from a fighter mission to UAV & Intelligence operations, or moving into the brand new field of Cyber Defense Operations, that change will challenge even the best units. The Guard needs to brace for a future of difficult challenges. If not a mission change, then it could be a base consolidation like the Wisconsin Air National Guard example. Even though the idea has been discussed, BRAC seemingly would be an absolute last

resort for Congress.⁶⁷ Nevertheless, the DOD must consider all options to get the military budget under control. At the end of the day, the Air National Guard has a legacy of honoring its commitment to community and showing great pride and commitment to mission excellence. The future will bring change not only for the Air Guard, but the Air Force and the military as a whole.

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