GROWING STRATEGIC THINKERS
FOR THE
AIR NATIONAL GUARD

BY
LT COL DALLAS F. KRATZER II

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ABOUT THE AUTHOR

Lieutenant Colonel Dallas F. Kratzer II is a military personnel officer in the Kentucky Air National Guard. Colonel Kratzer received his commission from the Academy of Military Science, McGee-Tyson Air National Guard Base. Beginning his career as an Air Force Reserve officer, he served as the 445th Maintenance Squadron executive officer, the chief of transportation, and then as the Aircraft Generation Squadron “A” Flight officer-in-charge for the 445th Airlift Wing at Wright-Patterson Air Force Base, Ohio. In 2001, Colonel Kratzer took a three year active duty tour as the Assistant Professor of Aerospace Studies at the University of Louisville Air Force Reserve Officer Training Corps (AFROTC). Upon completion of the AFROTC tour, he served as a Commissioned Officer Training School instructor at Maxwell Air Force Base, Alabama. Since joining the Kentucky Air National Guard in 2006, he has had an opportunity to serve as the 123rd Mission Support Group deputy commander, 123rd Airlift Wing antiterrorism officer, and the 123rd Airlift Wing executive staff officer. Colonel Kratzer has a bachelor’s degree in Management, Human Resources from Park University, Parkville, Missouri and Masters of Art degrees in Christian Education from The Southern Baptist Theological Seminary and Military Philosophy from the School of Advanced Air and Space Studies. Additionally, he earned a Doctorate of Philosophy in Educational Leadership and Organizational Development from the University of Louisville. Colonel Kratzer serves as the director of military personnel for the Kentucky Air National Guard, Joint Force Headquarters-Kentucky, Frankfort, Kentucky.
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ABSTRACT

The Air National Guard is struggling to develop leaders that have the right combination of experience, training, and education – strategic thinkers prepared to work at the highest level of strategy and policy-making. General Craig McKinley, Chief of the National Guard Bureau, perceiving a shortage of strategic thinkers in the National Guard, committed “to build(ing) a bench of future leaders who are ready to step into key positions as needs and opportunities arise.”

Residence senior developmental education and many advanced civilian degree programs facilitate the transition from the tactical world to the strategic realm. Unfortunately, only about 10% of the Air National Guard colonels through major generals have residence professional military education and only 58% in those ranks have advanced academic degrees. Most of the Air National Guard bench lacks the academic tools and credentials to operate with maximum effectiveness at the highest levels of strategy and policy-making.

To build a bench of well-prepared strategic leaders, the Air National Guard must put officers that have tactical experience, residence senior developmental education, and advanced academic degrees into senior leader positions. One way to achieve this is to create a system whereby every officer selected for 0-7 attends senior developmental education before becoming a general.
CONTENTS

Chapter                                      Page

DISCLAIMER ..................................................  ii
ABOUT THE AUTHOR  ......................................  iii
ACKNOWLEDGMENTS .......................................  iv
ABSTRACT ......................................................  v
CONTENTS ......................................................  vi
INTRODUCTION ...............................................  1

1 STRATEGIC THINKING AND THINKERS ............  8
2 FUNCTION AND FRAMEWORK OF THE AIR NATIONAL GUARD .  30
3 PROFESSIONAL DEVELOPMENT IN THE AIR NATIONAL GUARD.40
4 FUTURE OF AIR NATIONAL GUARD STRATEGIC THINKERS . . .  54

BIBLIOGRAPHY ...............................................  70

Illustrations

Table

1 FY11 Residence SDE and Civilian Education of Current ANG Senior Officers ........................................ 43
2 Percentage of Officers with Residence SDE for FY07 thru FY11 . . 49
3 Percentage of Officers with Masters-level or Higher Degrees for FY07 thru FY11 ........................................ 51

Figure

1 Function of the Air National Guard ..................  31
2 Structural Representation of the Air National Guard Levels . . .  32
3 Strategic Thinking Scale by Level of Position .......  34
Introduction

In a strategic environment in which a broad array of security threats to the United States are expected to emerge and America’s civilian capacity remains limited, the military will have to continue to adapt to new circumstances and perform an even wider variety of challenging tasks.

--John A. Nagl and Brian M. Burton

In the past decade the Air National Guard (ANG) has experienced a tumultuous evolution in missions on the magnitude never before seen, ranging from domestic and international disasters to supporting the active duty component in two ongoing combat missions half a world away. During this time, the Air National Guard has transitioned from being considered a “strategic reserve” to an “operational force”, becoming an integral partner in the Total Force concept.¹ Secretary of the Air Force Michael B. Donley recently attested to the significance of the Air National Guard, stating,

[I]t is the sustained commitment of the National Guard that has helped give meaning to the term Total Force in communities all across America. And as the Air Force use of the Reserve Component has evolved, so has our thinking about the framework of the Total Force Enterprise -- the powerful combination of the active and reserve components that together make up the United States Air Force.²

Secretary Donley’s comments draw attention to the increased relevance and value of the Air National Guard to the ongoing mission of the United States Air Force and the nation in general.

¹ Senate, Lt Gen Harry M. Wyatt Testimony Before the Senate Appropriations Committee, Subcommittee on Defense, 25 March 2009, 2.
As a valued partner in the defense of the country on a local and global scale, the Air National Guard is expected to provide ready and qualified forces for employment around the world. Part of the “ready and qualified force” includes senior officers who are prepared to engage in an array of leadership positions in and outside of the military arena.\(^3\) To prepare for such duty, an officer must engage in professional development designed to equip him with the strategic thinking skills needed at the higher levels of strategy and policy-making. The Skelton Panel identified academic education as key in preparing strategic thinkers, with professional military education being an indispensable element of that education.\(^4\) Hence, the focus of this study asks, “are the senior officers of the Air National Guard equipped to engage at the highest levels of military strategy and policy-making?” This is a very broad and complex topic that would require extensive analysis involving numerous and varied aspects of senior leaders, their capabilities, and the expectations associated with their positions. This type of investigation exceeds the intent of this study. This study narrows the scope to one aspect of equipping of senior leaders - professional development. More specifically it asks, “do the senior officers of the Air National Guard have the requisite professional development and academic credentials that produce ‘critical thoughts that enables creative solutions’ necessary for the new operational environment.”\(^5\) This study suggests the Air National Guard academic professional development opportunities have not been fully utilized to prepare senior officers with the strategic thinking skills, thereby hindering the ability to provide “ready and qualified” general officers to fill Total Force needs.

\(^3\) Air National Guard Strategic Plan, 2010, 7-11.


Significance

The significance of the capabilities of senior Air National Guard officers to operate at higher levels of strategy and policy-making became more critical when the 2008 National Defense Authorization Act (NDAA) was passed. The 2008 NDAA elevated the National Guard to a joint activity of the Department of Defense, resulting in the promotion of the Chief of the National Guard Bureau to a four-star position and the appointment of the position as the “principle advisor to the Secretary of Defense through the Chairman of the Joint Chiefs of Staff.”

Furthermore, the Act resulted in the establishment of a National Guard Bureau Joint Staff, expanding the need for senior Guard officers who have the education and experience to engage with active duty components and civilian agencies such as U.S. Northern Command, combatant commands, the Department of Homeland Security and Federal Emergency Management Agency.

In 2010, Gen Craig McKinley, Chief, National Guard Bureau (CNGB), in a letter announcing an initiative to develop senior leaders in the National Guard, stated the need “to ‘build a bench’ of future leaders who are ready to step into key positions as needs and opportunities arise.” Gen McKinley had found himself in a situation similar to Gen Michael Ryan, Air Force Chief of Staff in 1998, not having enough general officers with the right qualifications and capabilities to serve at the next higher level of responsibility. The National Guard needed to

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8 Gen Craig R. McKinley, Chief, National Guard Bureau, to The Adjutants General of all states, Puerto Rico, the US Virgin Islands, Guam, and the Commander General of the District of Columbia, memorandum, 30 July 2010.
develop a “bench” of strategic thinkers in both the Army and the Air National Guard.

The Air National Guard is a subordinate organization to the National Guard Bureau; therefore, the changes at the Bureau-level have had a ripple effect throughout the organization, particularly at the senior officer levels. As an integral part of the Total Force, Air National Guard senior officers are considered a readily available resource for key leadership opportunities in combatant commands, HQ Air Force, and National Guard Bureau. Simultaneously, these same officers are the key leaders responsible for the National Guard resources assigned within their state. Additionally, they are the primary military advisors to their respective governors and state agencies on National Guard affairs and capabilities that are available to the state.\textsuperscript{10}

The challenge for the Air National Guard is to ensure their senior leaders have the requisite strategy and policy-making skills commensurate with the needs of the Air Force and National Guard. These types of skills are an amalgam of the tactical and operational experiences within their career field and the strategic theory and critical thinking developed through advanced educational opportunities.

The uniqueness of the function and framework of the Air National Guard create a challenging dimension to the development of the senior officer corps. Yet, even with these unique challenges there is a core set of competencies that are expected of the senior officer ranks in the Air Force, and therefore in the Air National Guard.\textsuperscript{11} The aim of this research is to provide a picture of the level of professional development and academic preparedness of the senior officer corps of the Air National Guard. The premise of this work is that professional development efforts have not produced a sufficient number of senior officers with the

\textsuperscript{10} Michael B. Donley, Speech given at the 2010 Air National Guard Senior Leadership Conference, November 16, 2010.

\textsuperscript{11} AFDD 1-1, \textit{Leadership and Force Development}, v.
requisite strategic thinking skills and will have an adverse effect on the Air National Guard’s ability to provide “ready and qualified” general officers for the Total Force mission.

**Methodology and Structure**

This research uses quantitative methods in a two-fold application first, to determine the utilization of professional military education and academic advancement to prepare the senior officer corps; second, to contrast those findings with the national-level general officer positions the Air National Guard is expected to fill. However, before delving into the quantitative analysis, Chapter One provides a discourse on the ideas and concepts of strategic thinkers and reviews professional development efforts of the Air Force and civilian corporations. The first section establishes the characteristics and competencies of strategic thinkers; based on Karl von Clausewitz’ concepts of the “military statesman” and Harry Yarger’s “strategic thinker.” The second section of Chapter One reviews the Air Force’s professional development as described in Air Force Doctrine Document 1-1, *Leadership and Force Development* and the executive development programs of two international corporations; General Electric and Johnson and Johnson. Additionally, this section looks at the challenges General Michael E. Ryan, Chief of Staff of the Air Force in 1998, faced in preparing senior leaders for the post-Cold War Air Force.\(^\text{12}\)

Chapter Two looks at the function and framework of the Air National Guard in order to present the dynamic and multi-level environment in which Guardsmen operate. First, it reviews the function of the Air National Guard, which is to provide resources to accomplish the federal and state missions. The function of the Air National Guard is primarily focused on the tactical and operational needs of the federal and

state missions. Second, the framework presents the multiple levels of the state and national operations of the Air National Guard. Continuing the concept of the “Total Force framework” presented by Secretary Donley, the Air National Guard has senior leader responsibilities at the national and state levels, which are critical to the overall structure of the organization. The framework presents the interdependent components that provide the structure in order to achieve the function of the Air National Guard. The final section of Chapter Two explains the roles of general officers at the state, Air National Guard, and National Guard Bureau; where they serve as strategic advisors within the framework of the organization.

Chapter Three presents a statistical analysis of past and present trends in academic professional development of senior officers in Air National Guard. As mentioned in Chapter One, in this study professional development focuses on the educational opportunities senior officers have that prepared them to think critically and develop the depth to make strategic decisions designed to produce lasting conditions. The data includes the demographical and academic information of Air National Guard colonels through major generals for fiscal years 2005 to 2010. The analysis treats the utilization of professional military education and the completion of advance academic degrees as indicators of the preparedness of senior officers to move into higher levels of strategy and policy-making. The second half of this chapter looks at the positions currently filled by National Guard officers and their qualifications.

The final chapter discusses the implications and draws several conclusions based on the findings of this study. In addition, there are two recommendations put forth to address the findings and a suggestion for potential further research in the area of senior officer development in the Air National Guard.
Chapter 1
Strategic Thinking and Thinkers

As leaders move into the most complex and highest levels of the Air Force, or become involved in the strategic arena, the ability to conceptualize and integrate becomes increasingly important.

-- Air Force Doctrine Document (AFDD) 1-1

Leadership is about influence. It is about motivating the members of an organization to press toward a goal that they themselves might not otherwise pursue. Leadership happens on many different levels, ranging from a group planning a small, yet significant event to world leaders who are shaping the future of a nation. Those who are able to motivate and influence a group to achieve their goals are a unique breed, a blend of visionary and energizer, most often called a “leader.” Many argue that leaders are born - the Great Man theory - while others advocate leaders can be developed through experiences and education. This chapter will argue that to have the most effective leaders, both are required – the innate ability to lead, coupled with experiences and education designed to create strategic thinker with a broader perspective in critical and creative ways of thinking. It will show that the Air Force and a couple of the best commercial companies have developed professional development programs to intentionally select and nurture strategic thinkers.

Characteristics of Strategic Thinkers

In On War, Carl von Clausewitz presents such a person in his concept of the military genius – the military officer who embodies the

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“intellect and temperament” to rise above others to lead the organization to success.\textsuperscript{2} Clausewitz’s \textit{genius} is a person who has mastered the science of strategic thought and the art of balancing their emotional psyche so as not to be swayed by every wind of change. To Clausewitz, the military genius encapsulates unique traits that allow him to see and process information much more quickly and accurately than the ordinary military professional – the concept of \textit{coup d’oeil}.\textsuperscript{3} Literally, \textit{coup d’oeil} is defined as the “quick eye” or “glance”; in application, it is the idea of being able to quickly grasp a situation at a glance. For Clausewitz’s military genius, \textit{coup d’oeil} is an outward manifestation of “powers of intellect”, a combination of “discriminating judgment” and “skilled intelligence”.\textsuperscript{4} His words paint a picture of a leader who can quickly, and rightly, render a critical analysis and a logical decision of the situation in the blink of an eye.

One of the challenges of understanding the concepts of Clausewitz’s military genius is the fact he identifies the innate traits they should exhibit, but does not address their training or development – which may have been intentional. As the director of the \textit{Kriegsakademie}, the German War School, he would have seen many students who were training to serve as the leaders of the Prussian Army. Many of these young men would make great officers; however, only a small select group would become outstanding officers – the military genius. In Chapter Three of \textit{On War}, he lays out the unique skill set of those who have the potential to be the senior leaders of the military. Once those that have exhibited these traits were identified, their innate abilities could be refined through strategic education, sharpening their cognitive skills in

\textsuperscript{3} Clausewitz, \textit{On War}, 102-104.
\textsuperscript{4} Clausewitz, \textit{On War}, 101-104.
critical thinking to prepare them mentally for the challenges of leadership at the highest levels.⁵

Colin Gray further expands on Clausewitz’s idea that leadership is an innate quality, stating “[s]trategic excellence cannot be taught the same way or to anything like” the skill of tactical or operational thinking. He claims that it is more of an innate ability.⁶ Gray implies that a leader must have the natural talent to think strategically when he states that it is a “quality of judgment that cannot be taught.”⁷ However, this does not take into account the fact that even an innate ability can be refined and enhanced through exposure to learning opportunities that focus on developing such skills.⁸

Gray is correct in inferring strategic thinking is not cultivated through rote memorization of specific actions of tactics or procedures, nor strictly through training or experiences. He does expand on how strategists or strategic thinkers are taught, indicating that it is more experiential and theory based, with a blend of self-directed learning.⁹ Everett Dolman, in *Pure Strategy*, provides a clearer picture of how the strategist learns to think, stating:

> Whereas standard operating procedures and doctrine are efficiency maximizers for tactical decision makers and operational planners, there is no comparable utility in such handbooks for strategists. There are only principles and norms, analytic techniques, analogies and metaphors, personal experience to include the advice of mentors, and innate judgment for the strategist to draw on. These are tapped for insight, not for answers.¹⁰

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⁵ Clausewitz, *On War*, 111-112.
Strategic thinking is the development of the ability to employ the skills of analysis, critical thinking and synthesis in order to identify or create new meaning from disparate bits of information in complex and sometimes chaotic situations. Strategic thinking, as Gray states, is not taught like tactical and operational thinking. It is a high-order of thinking that has its own educational bent, as Dolman has described, focusing more on the intellectual processes than the more rudimentary skills of learning.

To think strategically is to employ the intellect to think of the aspects of war in such a way as to look for possibilities and probabilities that the ordinary mind would not typically grasp. To teach strategic thinking, one must break it down to the elemental components that make up the whole, into specific competencies that clearly articulate the desired skill to be learned. The next section does such, using the Strategic Thinking Competencies Model employed at the Army War College as described by Harry Yarger.

**Competencies of Strategic Thinking**

Yarger advocates the five competencies of systems thinking, thinking in time, ethical thinking, critical thinking, and creative thinking as integral to the development of strategic thinkers. Though the model divides the competencies into more manageable concepts, Yarger points out that it is “best understood as the integrative and iterative application

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14 Clausewitz, *On War*, 102-104

of these competencies” that result in effective strategic thinking. The following is a brief description of the strategic thinking competencies.

*Systems thinking* is the idea of viewing the situation as a whole and understanding the interconnectedness of the parts. In addition to thinking of a situation as a system, it also involves understanding the inherent nature of uncertainty and complexity of the system and how the myriad of actions and actors influence the situation. In this way, Yarger’s systems thinking relies heavily on complex adaptive system theory, which postulates that systems are in a constant state of adaptation and evolution because of changes in their environment. Furthermore, as the number and diversity of the parts in the system increase, the complexity of the interactions shows a corresponding increase. Holland uses the analogy of the human immune system to explain how a complex system is in a constantly cycling process of changing and adapting to the factors acting on the system. The human immune system is designed to protect the body from dangerous biological invaders that are trying to enter and corrupt the natural balance of the system. Because of the numerous and diverse nature of biological invaders, the immune system has to constantly adapt and evolve to counter these attacks and to help the body maintain a healthy status quo. As the immune system responds to the attacks, it develops newer and stronger ways to deal with threats from the external environment, while at the same time retaining the capabilities of past solutions.

The basic idea of complex adaptive systems provides context for Yarger’s explanation of how systems thinking is achieved. He breaks it down into three steps: 1) identifying the “whole of the system”, 2)

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defining the system’s behaviors and properties, and 3) understanding the functions of the system and the effects of change on it.\textsuperscript{21} As the first competency of strategic thinking, Yarger casts \textit{systems thinking} competency as the “big picture” to understanding the situation, a mental map of the environment through which the strategist begins to grasp the interconnected dynamics of the situation.

The \textit{thinking in time} competency focuses on the ability to reconcile the past with the future. Yarger puts forth the idea of being able to see “time as a continuous stream”, where it connects the activities of the past with the potentiality of the future.\textsuperscript{22} For the strategic thinker, he implies they must develop the ability to look at and understand the history of the situation in order to see how it does and can be used to influence the shaping of the future. This is not to say that one can predict the future by examining the past, but that it is more of an iterative process in which the strategic thinker looks at the past to understand the context of the present, thereby enabling himself to visualize a potential future. In doing so, the strategist uses time as a tool to manage and facilitate change in the future, broadening the potential courses of action as opposed to constricting them. Dolman further expands this idea, explaining that for the strategist time is always expanding – in both directions, unlike the tactician where time is a contracting concept to a final decision point.\textsuperscript{23}

Whereas \textit{systems thinking} is the mental map of the environment, \textit{thinking in time} is the mental time piece that can be wound forwards and backwards almost like a time machine; operating outside of the realm of real time to allow the strategic thinker to reflect on the past to project into the future.

\textsuperscript{22} Yarger, \textit{Strategy and the National Security Professional}, 13. 
The *ethical thinking* competency engages the strategist to focus on the moral aspects of strategic thinking. Ethics stem from the values and norms of a society or culture and are self-governing standards designed to determine what acceptable and unacceptable conduct is. Therefore, to think ethically means to understand the moral correctness of a situation within the context of the environment and the future.\(^{24}\) Though ethics are part of the social fabric of all cultures, for the strategist they take on a more poignant dimension than simply understanding the difference between right and wrong; they are the lenses through which actions must be viewed and considered. More importantly, the strategist must develop the ability to see both the short-term and long-term ethical ramifications of their strategies.

In strategic thinking, *ethical thinking* is the mental spectacles the strategist wears when perusing the mental map (*systems thinking*) and mental timepiece (*thinking in time*) in order to evaluate the potential strategic direction to take.

Yarger identifies *creative thinking* as the competency that taps into the intellectual ability to imagine “new ideas and concepts” to solve “potential issues and situations.”\(^{25}\) The skill of thinking creatively is the development of the thought of possibilities. It involves thinking that can be characterized as “out-of-the-box” or beyond the scope of the expected.

For many, this type of thinking is difficult to grasp. Yarger suggests that the difficulty of developing creative thinking lies in the fact that it runs counter to the linear traditional teaching style that is prevalent in many institutions.\(^{26}\) Though this may be a contributing factor to the problem, Yarger fails to employ his own systems thinking approach to best understand the situation. For example, other factors such as the tactical and operational emphasis on clear and concise

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planning can stifle the creative bent of a strategist, boxing them out of the creative thinking. Strategic thinkers are often trained in these concepts as they move through their careers.

However, just as these processes can be learned, they can be re-learned in a way that facilitates the creative genius of a strategist. For the strategic thinker, the task is refining the mental skill of cognitively creating the possible and potential futures within a given situation, in order to create a greater number of strategic outcomes from which strategy can be developed. As related to strategic thinking, creative thinking is the part of the “big picture” that has not been finished yet, it is the blank canvas or the horizon that stretches out to infinity to filled in by the creative genius of the strategist.

The final facet of the strategic thinking model is the competency of critical thinking. Yarger defines critical thinking as the “purposeful, reflective, and careful evaluation of information in order to improve one’s judgment.” Of the five competencies, critical thinking is the most difficult to fully grasp. Part of the challenge is that it is simply about thinking – thinking critically. Unlike the other competencies, which deal with thinking about aspects of the situation, critical thinking is about intently evaluating thinking itself. Critical thinking is an amalgam of the other four thinking concepts designed to approach the thought process with an open and inquisitive mind, looking to extract information, test assumptions, and draw inferences while understanding the implications of the results. In and of itself, critical thinking is focused on improving the strategist’s skill at judging a situation through

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28 Yarger, Strategy and the National Security Professional, 12.
29 Yarger, Strategy and the National Security Professional, 12.
30 Clausewitz, On War, 168.
31 Yarger, Strategy and the National Security Professional, 12.
conducting a critical analysis.\textsuperscript{32} As a core competency of strategic thinking, it is the mental “magnifying glass” used to inspect and analyze the other elements of thinking, focused on drawing out the minute, yet important, details associated with developing strategy.

Yarger provides a good working definition of the five competencies that are the framework for understanding the multi-faceted aspects of strategic thinking. These competencies are a mixture of innate traits and learnable skills, providing a basis for developing techniques to sharpen the intellectual acumen of individuals who show promise as strategists or strategic thinkers.

At this point it is necessary to differentiate between strategists and strategic thinkers, and the nature of their roles and responsibilities. A strategist focuses on creating and refining strategy within the machine of strategy development. Strategic thinkers, on the other hand, can be at any level within the organization but often gravitate to positions of leadership and are “generalists rather than specialists.”\textsuperscript{33} Either way, the goal is to develop the intellectual powers by understanding the thinking competencies of strategy.

**Strategy through Thinking**

Unlike the hands-on warfare of the tactical world, strategic thinking engages the brain in order to do battle in the minds of those that have the power to bring the war to an end. In *Explorations in Strategy*, Gray states, “tactics is what forces do, while strategy is the meaning of what forces do for the course and outcome of a conflict (*italics added*).” The idea is that strategy is the use of an individual’s mental and intellectual capabilities to make sense of how the military means will be used to achieve the political ends.\textsuperscript{34}

\begin{footnotes}
\textsuperscript{32} Clausewitz, *On War*, 158.
\textsuperscript{34} Gray, *Exploitations*, 5.
\end{footnotes}
This concept is further expanded by Everett Dolman in his book *Pure Strategy*, where he makes a clear delineation between the tactical thinker and the strategic thinker, stating:

Tactical thinkers seek a specific set of actions that, given extant conditions, will force opponents to bend to their will. Strategic thinkers seek the constraining conditions that are most likely to allow such a tactical set of actions to work.... Strategists seek principles that are useful in all situations, regardless of the contextual limits.\(^{35}\)

His premise is that strategists and strategic thinkers look at the possibilities while tactical thinkers are focused on decision-making and how best to capitalize on the moment.\(^{36}\) According to Dolman, the tactician seeks finality, allowing events to achieve closure as they move on to the next situation. He attempts to regulate and press complexity and chaos into an orderly plan for execution.\(^{37}\) This is not to say that tacticians cannot operate in a complex or chaotic environment, just that they attempt to minimize the unexpected by planning. For the strategist, each event is a chaotic milieu of possibilities that may or may not transpire and are subject to change – and strategists are comfortable with this uncertainty and element of surprise. Dolman’s description of a strategist correlates well with Clausewitz’s concept of temperament and intellect in the military genius but presents a more concise picture of the strategic thinker in action.

The overarching idea between these authors is that the strategic thinker engages in critically analyzing the ends to understand the best ways to employ the means, taking a holistic approach to evaluate a situation, not necessarily to solve a problem.\(^{38}\) These concepts support the model Yarger advocates as the core competencies of strategic

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\(^{35}\) Dolman, *Pure Strategy*, 76.
\(^{36}\) Dolman, *Pure Strategy*, 76.
thinking. Therefore, his competencies become a point of reference in developing techniques in order to sharpen the intellectual skills of strategic thinkers.

The idea of creating techniques to educate strategic thinkers may sound contrary to what Clausewitz said about the innate nature of the military genius, but it is not. In Chapter Two of Book Two, he goes into great detail on the relationship of theory, strategy, and knowledge in educating a future commander. 39 Clausewitz’s discussion of theory is similar to the language Yarger uses to describe his five competencies, noting that he views theory as a “guide” to the future commander that is “meant to educate the mind”, thereby speaking to the teachability of strategic theory. 40 Later in the chapter he adds that only “through the medium of reflection, study and thought” can the senior commander gain the intellectual knowledge. 41

Extrapolation of the salient points of Clausewitz’s discussion on the purpose and intent of theory and knowledge leads to the concept that strategic thinking can be learned through a formal educational process. This concept is supported by the Skelton Panel findings, which emphasize the importance of professional military education as part of the development of strategic thinkers. 42

At the same time, for strategic thinking to be most effective, it must be employed by leaders who understand the dynamics of strategic thought and the impact it has on achieving the end goals of national policy. Employing strategic thinking at the highest levels is the realm of the senior leadership; however, it is a skill that is developed and honed throughout their career. From the military perspective, Clausewitz points out that as an officer rises to higher levels of responsibility there is

39 Clausewitz, On War, 141-147.
40 Clausewitz, On War, 141.
41 Clausewitz, On War, 146.
a corresponding increase in the intellectual capital required at each level, implying a corresponding increase in the level of strategic thinking.\textsuperscript{43}

Each leadership position within an organization has a certain level of intellectual capabilities expected from those assigned to perform the duties. At the lower levels, officers are responsible for the tactical and operational missions associated with their unit. They focus on gaining the experiences needed to understand the mechanics of warfare and human capabilities and interaction; it is a time of experiential learning within their career field. The majority of the duties are primarily associated with tactically and operationally centered thinking in order to accomplish their assigned tasks. Some strategic thinking competencies such as critical thinking and imagination are present but on a more limited scale, and there is usually little opportunity to exercise them on a grander scale.\textsuperscript{44} At the high end of the operational environment the strategist is first seen to operate as an individual position. Gray defines their role as,

\begin{quote}
\textit{(E)ither, or both, with: (1) guiding and shaping subordinate military operations by major units in campaigns for the purpose of securing military advantage (success or victory); and (2) guiding and shaping the course of military events for the purpose of achieving the polity’s political goals.}\textsuperscript{45}
\end{quote}

The idea is that they are in a position to influence the organization through the use of their strategic skills. Gray has a general officer in mind in this description, but it could just as easily be a senior major or lieutenant colonel for the first part and the senior officer for the latter part, with their responsibilities growing as they move up in rank.\textsuperscript{46}

\begin{itemize}
\item \textsuperscript{43} Clausewitz, \textit{On War}, 110-111.
\item \textsuperscript{44} Gray, \textit{Schools for Teaching Strategy}. 14.
\item \textsuperscript{45} Gray, \textit{Schools for Teaching Strategy}. 14-15.
\item \textsuperscript{46} Gray, \textit{Schools for Teaching Strategy}. 15.
\end{itemize}
As an officer moves into higher levels of the organization, they move from the battlefield to the political arena where strategy and policy replace the campaigns and battles of the tactical and operational duties.\textsuperscript{47} This is also a transition point from strategist to strategic thinker. At this level, senior leaders have more latitude in the performance of their duties and are freer to engage in strategically oriented activities. At the highest levels, Clausewitz says they must become “statesmen”, balancing the requirements of the military objectives with the requisite political end state. At the higher levels of leadership, the strategic thinking competencies of systems thinking, thinking in time, and ethical thinking become integral to their thought processes. They need to take on a holistic approach to the challenges that are presented to them, understanding the interconnected dynamics of complex adaptive systems.

The “military statesman” is expected to grasp and wisely employ the capabilities of the military machine he leads while being sensitive to the political entities and environment in which he serves – he must be a strategic thinker.\textsuperscript{48} Furthermore, the twenty-first century military statesman has the added challenge of operating within a media-saturated environment, where his actions and decisions are often broadcast on a national and international level within minutes. Though he may not be in a physical combat zone, he operates within a political and public environment that can be just as engaging.

Strategic thinking skills equip senior leaders with the resources and perspective to be prepared for any given situation. Therefore, it is incumbent on organizations to create an environment where strategic thinkers can be identified early and prepared for positions that require this skill set – this is called professional development. The next section presents a historical perspective of the United States Air Force’s efforts to

\textsuperscript{47} Clausewitz, \textit{On War}, 111.
\textsuperscript{48} Clausewitz, \textit{On War}, 111-112.
develop strategic thinkers and how professional development could be used to prepare senior officers to engage in higher levels of strategy and policy.

**Strategic Leadership Development**

There is a subtle difference between a strategic thinker and a strategist; a strategist occupies a duty or position and a strategic thinker displays an aptitude. They are linked in that there are similar characteristics and expectations of capabilities; however, the strategic thinker is often better suited for senior leadership than a strategist. The differences between the two become more pronounced as an officer moves up in rank – which can result in a gap between capabilities and expectations in a senior leadership position. This is where professional development becomes integral in developing strategists and strategic thinkers.

The words “professional development” conjure up a plethora of ideas and opinions, ranging from entry-level management courses to programs designed to sharpen the strategic perspective of leaders at the highest levels of the organization. For this study, the term “professional development” deals with the development of executive skills designed to prepare individuals for greater responsibilities at the highest level of leadership. Executive leadership differs from basic management and leadership skills in that it is the transition point from the operational level to the strategic level of the organization. In the vernacular of the business world, it is moving to the “district/corporate office” from the “field” operations. For the military, executive leadership equates to positions at “higher headquarters” or “staff-level” positions. No matter what the position is called, both the military and business strive to identify and capitalize on the skills and abilities of individuals that show exceptional talent at leading others – moving them into a formalized
education program designed to align and enhance the skills they have already displayed.

**Developing Aerospace Leaders (DAL)**

For the Air Force professional, Air Force Doctrine Document (AFDD) 1-1 provides the overarching expectations for force development on the tactical, operational and strategic levels.\(^{49}\) The document is an outgrowth of many years and various projects designed to create a systematic process for developing professional airmen capable of meeting the mission challenges facing the Air Force. However, the true genesis of professional development in the Air Force and the origin of AFDD 1-1 began in the late 1990s.

In 1998, Air Force Chief of Staff General Michael E. Ryan was confronted with a leadership gap in a very profound way. As he surveyed the capabilities and qualifications of his senior officers he found a disturbing trend: they were too specialized in their Air Force Specialty Codes (AFSC) and were not prepared to operate at higher levels of responsibility.\(^{50}\) This was a situation, as Clausewitz points out, where though they were exceptionally capable and proficient officers, they did not have the requisite skills needed for the next level of leadership.\(^{51}\)

General Ryan started the Air Force down a path to revamp the professional development on every level, starting with the officer corps and reaching down to the newest airmen. One of his first steps was to begin the Developing Aerospace Leaders (DAL) initiative which was charged with developing a process for growing strategically thinking

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\(^{51}\) Clausewitz, *On War*, 110-111.
leaders in the Air Force.\textsuperscript{52} The DAL initiative became instrumental in making strategic thinking and professional competencies important in the Air Force and laid the groundwork for educating officers in the areas of the international and domestic political environment.\textsuperscript{53}

Significant to this current work is the emphasis the DAL initiative placed on military and civilian professional education to develop strategic thinkers.\textsuperscript{54} Dr. James Smith, writing on DAL, noted, "(E)ducation provides the framework against and upon which all experience will be made meaningful and competency enhanced." The "framework" he alludes to is the knowledge base the officer has readily available to tap into when needed, which harkens back to Clausewitz's concept of absorbing knowledge to the point that it appears to be a natural talent.\textsuperscript{55}

To facilitate this in-depth knowledge, the DAL initiative outlined an "education continuum of aerospace leaders and strategists", weaving in basic officer training, strategically focused studies, civilian education, and professional military education (PME).\textsuperscript{56} Education, to include military and civilian, became the centerpiece for developing strategic thinkers. Furthermore, the program recommended that officers who show exceptional strategic-thinking skills should be identified and given the opportunity to participate in advanced PME courses like the School of Advanced Airpower Studies (now called the School of Advanced Air and Space Studies) and Air Force Fellowship programs. Upon graduation, these officers would be targeted for specific assignments that expand on


\textsuperscript{53} Smith, \textit{Expeditionary Leaders}, 31-33.

\textsuperscript{54} Smith, \textit{Expeditionary Leaders}, 35-36.

\textsuperscript{55} Clausewitz, \textit{On War}, 147.

\textsuperscript{56} Smith, \textit{Expeditionary Leaders}, 36-42.
their unique strategic education, thereby facilitating their preparation for senior leadership positions.\textsuperscript{57}

Rising to the level of a senior leader is an accumulative process. Innate abilities and education are the foundation, tactical and operational experience builds the infrastructure, but position dictates the benefits of the strategic thinking. An individual can be the greatest strategic thinker – having the attributes, education and experience indicative of true genius – but if he is not in a position in which the organization can capitalize on his skills, then it is all for not. This is true for leaders in any type of organization, whether it is the military officer or the business professional. To garner the most out of a strategic thinker, the organization must afford him the opportunity to serve in a position commensurate with his training. Therefore, many professional development programs have mechanisms in place that incorporate senior leaders into the process of “opening doors” of opportunity through mentoring and succession-planning designed to match strategic thinkers to future positions. This concept is a recurring theme in many of the corporate leadership development programs.

**Corporate Examples of Professional Development Programs**

The DAL initiative advocated a new approach for developing strategic thinkers in the Air Force; however, these concepts were already commonplace in the corporate sector. In their book, *The Leadership Investment*, Fulmer and Goldsmith found that most successful organizations have professional development programs that identify, develop, and position individuals for executive-level development.\textsuperscript{58} Their research looked at global corporations such as General Electric (GE),

\textsuperscript{57} Smith, *Expeditionary Leaders*, 40-41.

Royal Dutch Shell Company, Hewlett-Packard and Johnson & Johnson (J&J) as examples of highly effective and well-established executive-level professional development programs. They found that at the core of many of these programs was an overriding theme of developing the strategic thinking abilities of their leaders, highlighting the linkage between the corporate strategy, strategic change, critical decision-making, and strategic planning as related to leadership.\(^{59}\)

The overall focus of their study was more on the way these organizations manage their professional development programs than of the particular courses for developing leaders. Like the Air Force DAL initiative, the corporate programs had specific areas that stood out as being integral to the success of their professional development programs: 1) a coordinated selection process, 2) a succession plan for program participants, and 3) senior leader support.\(^{60}\)

Many aspects of corporate leadership programs are similar to the DAL program with regards to the political environment and the competencies related to leadership, technology, operations, strategy and the organization; but their overall management of the programs was very different. For example, GE has a large staff and facilities that manage the corporate program, which is similar to the Air Force centralized professional development campus at Maxwell Air Force Base, Alabama. While Johnson and Johnson operate their professional development selection process through a part-time committee spread across their organization, somewhat similar to the board selection process the Air Force uses for professional development. Yet each produces the types of leaders they need to further the strategic initiatives of their business plan. The following section provides a more detailed look at the unique or novel approaches to managing an executive development program by GE and J&J.


GE established a training facility at Crotonville, New York, in 1956 as a university for developing leaders for their global enterprise. Each year more than 10,000 GE business professionals attend leadership courses at the facility. Of particular note is the Corporate Leadership Development (CLD) program which is designed to “create, identify, and transfer organizational learning” throughout the corporation. Individuals gain entry into the CLD program through a combination of recommendations, past experience, and potential for future success. Upon completion from the CLD program, GE uses a succession plan to assign graduates to positions that match the education they received at Crotonville and will benefit the overall organization. By using one centralized training program GE can control the intake of potential candidates, track their progress through each level of leadership development, evaluate their strategic-thinking capabilities, and assign them to positions which meet their abilities. The uniqueness of GE’s approach to leadership development is not the program itself but more importantly, the “deep bench” within the organization and the successes achieved by graduates outside of the organization. GE’s leadership program has been noted as generating “the most powerful bench” of leaders in any global organization. This bodes well for the organization in a number of ways. First, the immediate return on investment is that they have a clear and consistent strategic message communicated through each graduate – they care about developing people. Second, they have mitigated the threat of a gap in qualified leaders to fill vacancies by having a “deep bench” of trained and qualified leaders. Though the “bench” statement seems to be exaggerated, it is backed up by the fact that over the years a substantial number of graduates from

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62 Fulmer & Goldsmith, *Investment*, 64-65
63 Fulmer & Goldsmith, *Investment*, 79.
the CLD program have gone on to become Chief Executive Officers outside of GE – validating the success of the Crotonville program.\footnote{Noel M. Tichy, \textit{The Leadership Engine: How Winning Companies Build Leaders at Every Level.} (New York, NY: HarperCollins, 1997), 282.}

Another professional leadership program that has been highly successful is the J&J Corporate Education and Development (CED) program. The unique aspects of the CED program are the collaborative process between the corporate and operations level, the Executive Development Program (EDP) and the part-time succession planning committee.\footnote{Fulmer & Goldsmith, \textit{Investment}, 116-135.} At J&J, the corporate level is responsible for leadership development and teaching the core values of the company, while the operational level focuses on management development. By differentiating between leadership and management training J&J centralizes the development of strategic level leaders at the corporate level, allowing them to provide a consistent leadership theme across the organization.\footnote{Fulmer & Goldsmith, \textit{Investment}, 116.}

At the executive level, the EDP is individually tailored for the up-and-coming leaders to prepare them for positions at the senior executive or management board levels.\footnote{Fulmer & Goldsmith, \textit{Investment}, 118-119.} Participants in EDP volunteer and must be sponsored by the leadership in their business department. An interesting dynamic to this process is that the business department has to bear the expenses associated with participating in EDP (at the time of the writing it was approximately $15,000 to $20,000 per person).\footnote{Fulmer & Goldsmith, \textit{Investment}, 124-125.} This is a significant investment for the business unit, but it is seen as an investment for the entire organization because of the potential return on investment through better leaders. Therefore, nominating a person to the EDP is taken very seriously by both the individual, the business unit leadership and the EDP staff – resulting in significant “buy-in” and a higher level of accountability by all of those involved in the program.
In conjunction with the EDP, J&J employs a succession planning process that links the participants with a future position, creating a targeted career progression plan while meeting the executive leadership needs of the organization. It may sound like an elaborate process, but J&J is able to manage succession planning through a part-time committee of leaders from across the organization. J&J’s novel part-time approach to succession planning has several benefits, such as managing the cost associated with leadership development and involving multiple senior leaders from different corporate units in the development of potential future leaders. Programs like GE and J&J have some resemblance to the Air Force professional development program, yet there are nuanced differences. More importantly, there are elements of both of these programs that have relevance to the way a professional development program should be managed, especially the emphasis on selection and succession planning. Making sure the right people are selected is important in the process, but having a plan for how they will use their new found knowledge is paramount.

**Way Ahead for the Strategic Thinker**

Strategic thinking is both a trait and a skill. As a trait, it encompasses the innate abilities that compose the intellectual powers of Clausewitz’s military genius, such as coup d’œil, courage and strength of mind. As a skill, it encompasses the teachable competencies that encompass the systems thinking, thinking in time, ethical thinking, critical thinking and creative thinking Yarger identifies as the core components of thinking strategically. Therefore, the ideal strategic thinker is the blending of nature and nurture, where nature provides the building blocks and nurture is the mortar that holds the blocks together.

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Unlike the natural talent, nurture does not just happen – it takes a coordinated effort to identify those with the talent and to engage them in learning activities that hone their skills. The most effective way to do this is through professional development programs tailored to meet the outcomes desired by the organization, whether it is focused toward tactical expertise or strategic genius. Not all tacticians will become strategists; neither will all strategists become senior leaders. But some from either group can become strategic thinkers who will lead their organizations. With this in mind, it is incumbent that senior leaders in any organization to put mechanisms in place to not only identify, but to educate and position the strategic thinkers of the future.

Turning to the situation in the Air National Guard, the question is, “has an investment been made in developing strategic thinkers for the most senior positions?” If not, what is the “way ahead” for developing officers that have the traits and skills needed to fill the highest levels of leadership with the Air National Guard?

Employing strategic thinking concepts, a systems thinking approach is used to evaluate the organization. The next section focuses on painting the picture by explaining the function and framework of the Air National Guard and how the senior leaders fit into the organization.
Chapter 2

Function and Framework of the Air National Guard

The Air National Guard is part of the complex and multi-dimensional Total Air Force and is charged with protecting the life and liberty of the American people.\(^1\) As part of the Total Air Force, the function of the Air National Guard is to be a ready resource for missions best accomplished by airpower, which are conducted at the federal or state level. Within the DoD, the Air National Guard is part of the framework of the National Guard, working at the national and state levels on Guard-centric initiatives.

The concepts of function and framework provide tools for understanding the Air National Guard’s layered purposes and organization. The function (Fig. 1) relates to the mission of the Air National Guard, which is to provide tactical resources and capabilities to achieve both the federal mission and the state mission. The framework (Fig. 2) relates to the management, which is the strategic leadership at the national level or state level. Although the Air National Guard leaders may be able to lead their units in performing their function without preparation in strategic thinking, they need this preparation to adequately engage in the upper levels of the framework. The following sections present the “big picture” of the function and framework of Air National Guard, which illuminates the dynamic environment in which senior leaders must operate.

Function: The Federal and State Mission

The function of the Air National Guard has been and continues to be its raison d’etre – to be a ready-resource for the federal and state missions to meet the strategic and political objectives achievable through

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\(^1\) Air National Guard Strategic Plan, 2010, 5.
the use of air, space, and cyber power. As mentioned above, there are two aspects to the function of the Air National Guard – the federal and state missions.

Regarding the federal role, the mission is “to provide trained units and qualified persons available for active duty in the armed forces, in time of war or national emergency... (10 U.S.C. 10102).” The state role is similar but focused on responsibilities within the given state, “to provide trained, organized and disciplined units and individuals to protect life and property and to preserve peace, order and public safety within the state or territory.”

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<th>Function of the Air National Guard</th>
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<tr>
<td><strong>Sample Federal Missions</strong> (Title 10 – Outside the US)</td>
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<tr>
<td>• Global Contingency Support</td>
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<td>• International Humanitarian Assistance</td>
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<td>• Global Airlift Operations</td>
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**Figure 1: Examples of the Function of the Air National Guard**

*Source: Adapted from National Guard Bureau (NGB) Posture Statement 2011, Adding Value to America.*

The requirement to provide trained and qualified personnel to accomplish a multitude of missions is common to the federal and state missions. The need to produce trained and qualified personnel runs throughout the Air National Guard beginning with the newest guardsmen up to the most senior leaders. The challenge is to prepare guardsmen to perform an array of duties ranging from routine functions at the junior levels to the strategic thinking at the highest levels. Since the mission aspect of the Air National Guard tends to be more tactically and operationally oriented than the Regular Air Force (RegAF), each unit can

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2 Air National Guard Strategic Plan, 5.
3 Air National Guard Strategic Plan, 5.
focus on preparing for their federal mission while being available to conduct special operational missions in the event of a crisis within their state or in the contiguous states.

The Air National Guard operates within a framework of increasingly strategic level of responsibilities in order to accomplish their state and federal missions. Strategists and strategic thinkers are needed at every level, with the need being the greatest at the highest levels.

**Framework: National and State Levels**

In addition to the federal and state roles, the Air National Guard operates within a framework that has two levels - the state level and the national level. At the state level, the framework consists of the Air National Guard units and state headquarters leadership staff assigned within a given state or territory. The state level leadership operates...

![Diagram of the Air National Guard Framework](image_url)

**Figure 2: Structural Representation of the Air National Guard Levels**

*Source: Author’s Original Work.*
within the State Headquarters-Air and the Joint Force Headquarters-State. The functions and responsibilities of the state senior leaders are explained in the next section.

The national-level framework has two interrelated, yet separate directorates – the Air National Guard and the National Guard Bureau. The Air National Guard operates the Air Staff-level directorates, providing program management, strategic guidance and policy direction to the state-level organizations on Air Force related issues. Additionally, the Air National Guard works with and through the National Guard Bureau and Air Force on issues related to their missions.4

The National Guard Bureau is the overarching headquarters for the Air and Army National Guard forces in the 54 states and territories of the United States. The National Guard Bureau is tasked as the focal point for joint Air and Army National Guard efforts at the state and national levels for the Department of Defense. On the national level, the National Guard Bureau is the primary conduit for developing the strategic objectives and policies are developed and for allocating Guard personnel to outside agencies as advisors.

This study focuses on the senior officer positions at the higher levels of the state headquarters, the Air National Guard and the National Guard Bureau because of their strategic and political significance. These positions need to be filled by senior leaders who have the traits and skills of a strategic thinker and are prepared to operate at higher levels of strategy and policy-making.

4 NGB, Adding Value, 2-7.
Air National Guard Senior Officer Structure

The National Guard is a three-tiered structure that includes 54 states and territories, the Air National Guard headquarters staff and the National Guard Bureau headquarters staff (Fig. 3). Each level has a core staff of senior officers (0-6 and above) responsible for leading, directing, and planning the training and equipping of the Air National Guard forces assigned to their commands.

![General Officer Structure](image)

**Figure 3: Strategic Thinking Scale by Level of Position**

*Source: Adapted from Albert A. Robbert, Stephen M. Drezner, John Boon, Larry Hanser, Craig Moore, Lyunn Scott, and Herbert J. Shukiar. Integrated Planning for the Air Force Senior Leader Workforce: Background and Methods (Santa Monica, CA: RAND, 2004).*

Though not to scale, Fig. 3 reflects the increasing need for strategic thinkers at each higher level of the organization, with the National Guard Bureau having the preponderance of the positions that need strategic thinkers.
**Senior Officers at the State Level**

At the state level, the strategic leadership positions are part of a two-tier structure that includes a State Headquarters-Air staff and a Joint Force Headquarters-State staff – each with an 0-7 position. Additionally, there are several 0-6 positions at each headquarters level and in the subordinate units.

The State Headquarters-Air senior officer serves as the assistant adjutant for air and is responsible for the Air National Guard units assigned within the state. Additionally, this position serves as an advisor to the governor and senior National Guard leaders within the state. The State Headquarters-Air senior officer, at the state level, is responsible for the air-centric operations within the state or territory and is the conduit through which the state-assigned Air National Guard units and the national-level organizations communicate.

The second general officer position in the state is the Joint Force Headquarters-State senior officer, serving on the Joint Staff in conjunction with their Army National Guard counterparts, working with state government and subordinate local civilian agencies to implement strategies and policies designed to “protect life and property and to preserve peace, order and public safety.” The Joint Force Headquarters-State senior officer advises the governor and the adjutant general, and their respective staffs, on issues related to the use of National Guard assets in support of civilian-related events, such as natural and man-made disasters.

A third possible Air National Guard general officer is the State Adjutant General, who is appointed by the governor and serves at the 0-8 rank. The Adjutant General is the senior ranking National Guard officer in the state, commanding both the Air and Army National Guard resources within the state.

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5 Air National Guard Strategic Plan, 5.
Though the state level individually has the smallest number of senior officers – with each state typically having only a couple of Air National Guard general officers – aggregately, they represent over two-thirds of the general officers in the Air National Guard, with a combined total of over one hundred 0-7s and 0-8s. Many of these officers serve in strategically significant “dual-hatted” positions where they are Air National Guard advisors to the active duty Air Staff. These advisory positions require individuals who have the strategic vision, critical thinking, and systems approach commonly found in strategic thinkers. They are in critical positions to provide the Guard perspective while understanding the strategic and political implications associated with their active-duty counterpart. Furthermore, those officers assigned to dual-hat positions are a source for filling higher-level advisory positions managed by the National Guard Bureau. These positions are described in greater detail below in the National Guard Bureau section.

**Senior Officers at the Air National Guard Level**

The Air National Guard is the Air Staff level for the 54 states and territories. Senior officers assigned at this level are the key strategic thinkers for the Air National Guard and are tasked with planning, policy-making, and strategic initiatives within their Air Staff directorates. The purview of the senior officers at this level is the staff-level functions between the 54 states and territories and Headquarters Air Force. The senior officers range in grade from 0-6 through 0-8, with one 0-9 assigned as the Director, Air National Guard. Though there are only a handful of general officers assigned to this level, there are numerous colonels assigned at the various levels.

The need for strategic thinkers at this level is two-fold. First, they are directly involved in shaping the future of the Air National Guard mission within their particular directorates. With the constantly expanding and changing missions in the areas of intelligence,
surveillance and reconnaissance (ISR); space; and cyberspace, there will be a continuous need for strategists and strategic thinkers in all areas of the Air Staff. Second, their staff experience makes them a primary source for filling vacancies at the next level of leadership within the National Guard, to include instrumental advisory positions throughout the DoD.

**Senior Officers at the National Guard Bureau Level**

The senior officers assigned at the National Guard Bureau level serve on the joint staff for the Air and Army National Guard, in advisory roles to organizations outside of the National Guard or on statutory tours (Title 10) in support of active component positions. Senior officers at the National Guard level range in grade from 0-6 through 0-9, with the most senior position being an 0-10, Air or Army guardsman who reports directly to the Secretary of Defense through the Joint Chiefs of Staff. As mentioned earlier, the 2008 NDAA established the 0-10 position in the National Guard. The first person assigned and promoted in the position was an Air National Guard general officer – formerly the Director of the Air National Guard, Lieutenant General Craig McKinley.

Officers assigned to Bureau-level positions serve at the highest levels of strategy planning, policy development, and command authority and are involved in shaping the national strategy for employment of National Guard resources on the national and state levels. Many of these senior officers are tapped to serve in advisory and liaison positions throughout the DoD and other government agencies. For example, during FY11 Air National Guard general officers were serving full-time in positions such as the 1st Air Force command and vice commander, assistant to the chairman of the joint chiefs of staff (CJCS) for National

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Air National Guard general officers (0-8/0-7) serve in traditional status positions in over a dozen advisory roles throughout the combat and major commands. One example is the “Chairman’s 18” at the joint staff where 18 reserve component officers, predominately 0-8s, work for and report to the CJCS. As of FY11, only two Air National Guard general officers were assigned to these positions. Additionally, there are numerous DoD positions that could be filled by Air National Guardsmen, but are filled by members of other reserve components. In total, there are approximately 24 full and traditional general officers attached to the National Guard Bureau but assigned to organizations outside of the Bureau to other DoD agencies. These leaders are expected to engage at the highest levels of strategy and policy-making, representing the Air National Guard on the national and international levels.

During a recent interview, when asked about why more Air National Guard officers were not filling these positions, Lt Gen Harry Wyatt, Director, Air National Guard (DANG), stated, “(W)hen it comes to having strategic thinkers ready for key positions, the other reserve components have done a much better job at preparing their people for those positions.” He agreed that professional development is an integral part of their preparation, and his office is working hard to provide opportunities to equip future leaders for these positions – part of this effort being the dual-hat positions mentioned above.

The need to build a bench of senior officers with strategic thinking capabilities is paramount to keep the National Guard engaged and relevant in the Total Force. As the function and framework of the air

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9 National Guard Assistance Program (NGAP) Document, NGB-GOMO, Lt Col LaBlant, to the author, e-mail, 25 January 2011.
10 LaBlant to the author, e-mail.
11 Lt Gen Harry Wyatt, (Chief, Air National Guard), interview by the author, 6 May 2010.
component of the National Guard continue to expand, the need for strategy-minded officers will increase.

Have the Air National Guard professional development opportunities been fully utilized to prepare senior officers with the strategic thinking skills necessary to meet the expanding needs? Education is but one part of the puzzle in preparing future leaders, but it is a good place to start since it is readily identified and quantified. Chapter Three provides a quantitative and qualitative look at several key data points that address the utilization of professional and academic opportunities to prepare senior officers for strategy and policy-making positions.
Chapter 3

Professional Development in the Air National Guard

A smaller force structure combined with an accelerating pace of change requires some proactive thinking about leadership development.

Gen Michael E. Ryan

For the military officer, professional development follows a building-block approach with education continuing throughout an individual’s career, starting with basic training and culminating in senior officer developmental education. In Chapter One, professional development was defined as the development of executive skills designed to prepare individuals for greater responsibilities. This theme is continued in this section. According to AFDD 1-1, at the strategic level “education assumes a predominant role in an Airman’s development,” focusing on development through professional military education (PME).\(^1\) This concept was reinforced by a follow-up study in 2010 by the Skelton Panel, stating PME “is the backbone in the development of the nation’s armed forces.”\(^2\)

As officers transition from the tactical and operational arena to the strategic level, they move from a predominantly experience-based training environment to one governed by in-residence professional military education and civilian advanced academics designed to improve their analytical skills and abilities “to deal with uncertainty and ambiguity.”\(^3\) The expectation is that by the time an individual reaches a

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senior leadership position, he or she will have completed numerous levels of PME and hold a civilian advanced academic degree, resulting in a strategic thinker prepared to operate at the highest levels of strategy and policy-making.\textsuperscript{4}

Residence PME and advanced academic degrees are an integral part of military officer professional development, and it is important that senior officers have capitalized on advanced education to develop strategic thinking skills. The Guard is allocated limited PME slots, and so it is crucial that these be expended on officers destined for senior leadership. We can investigate how efficiently PME resources are being allocated by using the military personnel data system (MilPDS), which records PME and advanced education as part of every officer’s official record.

This study uses MilPDS data, which includes the primary and secondary Air Force Specialty Codes (PAFSC and 2AFSC respectively), professional military education (PME), method of completion of PME, level of academic degree, and type of academic degree, and it covers a five-year period from FY07 to FY11.\textsuperscript{5} The population includes all colonels through major generals assigned to the Air National Guard during each fiscal year. The data is displayed below in one table that reflects the most recent fiscal year (FY11) and two tables that show a historical perspective based on rank and category.

A secondary data source is the \textit{Air National Guard Senior Leader Force Development (ANGSLFD) Survey Analysis}, which was conducted by Dynamics Research Corp in 2004 for the Air National Guard.\textsuperscript{6} This survey is similar to the 2001 and 2002 surveys conducted in the Air

\textsuperscript{4} AFDD 1-1, \textit{Leadership and Force Development}, 29-34.
\textsuperscript{5} Military Personnel Data System Report (MilPDS), Lt Col Anthony Schlagel, Air National Guard Force Development Section, Senior Leader Demographical Data Report (minus names), 1 February 2011.
\textsuperscript{6} Dynamics Research Corporation, \textit{Air National Guard Senior Leader Force Development Survey Analysis} (Washington, DC: General Services Administration, October 2004), 48.
Force and Air Force Reserve respectively. The survey was sent to Air National Guard officers in the ranks of 0-5 thru 0-9 and had a 20% (856) participation rate. The survey focused on data related to the experience, education, assignments, and perceived barriers to force development.

The combination of the MilPDS data and ANGSLD Survey provide a picture of the statistical facts (quantitative) and individual opinions (qualitative) of Air National Guard officers in relation to professional development. In analyzing the data, three assumptions are made.

First, the Air National Guard traditionally receives 21 school slots each year for 0-5s and 0-6s to attend residence SDE, and there are usually more nominees than there are slots to fill. The SDE quotas are a mixture of Air War College, sister-service war colleges, and Air Force sponsored fellowships. The challenge is to get the “right people in the right place” in order to develop their strategic thinking skills and prepare them for high levels of leadership.\(^7\)

Second, nonresidence SDE is required for promotion to 0-6, and therefore, all of these officers have completed that minimum required PME and have been exposed to strategic concepts. The difference is the depth, breadth, and rigor of the residence SDE programs and that most residence programs confer a master’s degree upon graduation – which the nonresidence program does not. Some of the officers had completed the nonresidence SDE prior to attending a residence program, but this did not impact the data.

Third, neither the Air Force nor the Air National Guard has a target or goal for the percentage of senior officers that should complete either residence SDE or advanced civilian academic degrees. Targets would help drive the Air National Guard toward a better educated leadership and this study suggests them. The targeted levels are based on the expected needs at each level and are designed to be a point of reference

\(^7\) Air National Guard Strategic Plan, 2010, 5.
for conducting analysis and recommendations. Refining and better-justifying education targets would be an area of future research.

**Aggregate Analysis of FY11**

The analysis of the senior leaders active in the Air National Guard at the beginning of FY11 found that just over 10% had completed residence SDE and approximately 58% had a graduate-level academic degree (Table 1). These numbers seem low, given the emphasis on professional development since the implementation of AFDD 1-1 in 2004.

**Table 1: FY11 Residence SDE and Civilian Education of Current ANG Senior Officers**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Average Age</th>
<th>Total In Grade</th>
<th># In Residence SDE</th>
<th>% In Residence SDE</th>
<th>Masters Degree or Greater</th>
<th>% Masters Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-8</td>
<td>58.4</td>
<td>46</td>
<td>7</td>
<td>15.2%</td>
<td>28</td>
<td>60.9%</td>
</tr>
<tr>
<td>0-7</td>
<td>54.8</td>
<td>113</td>
<td>9</td>
<td>8%</td>
<td>60</td>
<td>53.1%</td>
</tr>
<tr>
<td>0-6</td>
<td>51.1</td>
<td>971</td>
<td>77</td>
<td>7.9%</td>
<td>587</td>
<td>60.5%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>1130</td>
<td>93</td>
<td>10.4%</td>
<td>675</td>
<td>58.2%</td>
</tr>
</tbody>
</table>

*Source: Adapted from MilPDS Data from NGB/A1DL.*

Beginning with the 0-6 level, only 7.9% of the overall population have attended residence SDE and 60.5% have completed a graduate-level degree. Both 0-5s and 0-6s attend residence SDE. If the Air National Guard were doing a great job of making sure that the 0-5s it sent to SDE were those who would eventually become 0-6s, then we should expect about 76 of the 0-6 population of 971 to have attended residence SDE. This is the number of seats allocated each year to the Air National Guard for SDE (21) multiplied by the average time-in-grade for 0-6s (3.6 years). If all Air National Guard SDE graduates were either already 0-6s or eventually became 0-6s then we would expect to have 21 multiplied by
3.6, or 76 residence graduates in the 0-6 population. This is almost exactly the case, with 77 residence SDE graduates in the 0-6 population. The fact that the baseline and actual population are almost equal, 76 versus 77, infers that the right 0-5s are attending SDE and are being promoted to 0-6. Another significant finding is that a full third of them had completed nonresidence SDE prior to attending the residence course – this is important in that it could be a positive indication that some of the 0-5s or 0-6s perceived an added value in attending residence SDE. Both of these findings are favorable indicators of the effective use of residence SDE in preparing officers for higher levels of leadership. Of the three ranks evaluated, the 0-6 category is the only one to meet the expected baseline for residence SDE.

For civilian academic education, there are no criteria by which to create a baseline target. However, AFDD 1-1 does place high importance on attaining an advanced academic degree. Advanced academic education is widely available to military professionals and many benefit from the learning in their military duties, as well as their civilian employment. Furthermore, AFDD 1-1 advocates completing an advanced academic degree as part of professional development at the operational level and is viewed as part of the self-development officers are expected to do throughout their career.

On advanced academic education, the 0-6s are fairing slightly better than the 0-7s and are on par with the 0-8s. Over half of the 0-6 population, 60.5%, has an advanced civilian degree. However, in the last three years, half of those promoted to 0-6 did not have an advanced academic degree, implying self-development through civilian education may not have been a significant factor in the promotion selection process. The combination of a low percentage (60.5%) and a poor rate of promotion of those with advanced academic degrees indicate ineffective

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utilization of advanced academic opportunities to prepare strategic thinkers. It appears having an advanced academic degree is not significantly correlated to promotions to 0-7 or 0-8. While 60.5% seems low for the population of 0-6s given the intellectual rigors of 0-6 level work, I lack data on 0-5 advanced degrees and so cannot make conclusions about the impact of advanced degrees on 0-6 promotion.

Overall, the bench of 0-6s who have completed residence SDE and have a master’s degree or higher is right at the baseline, meaning that it is at capacity, in part because those who attend SDE in residence obtain a master’s degree. It appears professional development has been efficiently used in preparing a bench of 0-6s with the requisite strategic thinking capabilities needed for promotion to the next higher level. The next logical questions are how big does the bench need to be, and are these individuals the ones that will be promoted to 0-7?

The situation at the 0-7 level is not as good as the 0-6 level, with residence SDE at the 8% mark and only 53.1% having completed a master’s level or above. A realistic baseline for this category should be much higher for both categories - for several reasons. First, many of the strategically significant positions are filled by 0-7s. In order to have a bench “ready to step into key positions as needs and opportunities arise” all of the individuals in the 0-7 category need to be equipped as strategic thinkers.10 Second, officers in these positions are the primary source for filling 0-8 and 0-9 vacancies in the Air National Guard, where strategic thinkers are most needed for engaging in higher levels of strategy and policy-making. Third, many of these positions are the senior leaders within the states and territories and are integral in selecting the key leadership positions within the state. These leaders set the tone in regard to professional development; if they do not see a value in

10 Gen Craig R. McKinley, Chief, National Guard Bureau, to The Adjutants General of all states, Puerto Rico, the US Virgin Islands, Guam, and the Commanding General of the District of Columbia, memorandum, 30 July 2010.
residence SDE or advanced academic degrees then they are less likely to encourage others to pursue these opportunities. The standard becomes self-perpetuating.

Two issues present challenges to increasing the number of 0-7s with residence SDE. First, general officers cannot go back and complete residence SDE like the 0-6s can. They have already missed the opportunity for professional development and there are no equivalent strategic thinking courses available at their level. The only way to increase the number of officers with residence SDE at the 0-7 level is by promoting 0-6s with residence SDE. Yet, even if all 0-6s with residence SDE were promoted immediately to 0-7 (and a corresponding number of 0-7s without residence SDE retired) it would only move the overall percentage to approximately 77%. This is significantly greater than the FY11 rate of 8%, but ideally every officer at this level would be equipped with a residence SDE.

Another issue confronting the 0-7 level is civilian education, which is more than seven percentage points below the 0-6 and 0-8 levels. Few of these leaders would likely be interested or have the time to pursue another degree. On a positive note, 16 0-7s have terminal degrees (doctoral level), eight of which are in law. Civilian degrees of this caliber are at the top of the academic ladder and should be considered the highest level of strategic thinking preparation.11

Based on the 0-7 data, professional development for the strategic level is falling short. The Chief of the National Guard Bureau and the Director of the Air National Guard have said that the Guard needs to prepare more officers to serve at the highest levels of strategy and policymaking.12 This is not to say that the officers currently in these positions

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12 McKinley, memorandum, 30 July 2010 and Gen Harry Wyatt, (Chief, Air National Guard), interview by the author, 6 May 2010.
are not qualified, just that they might not be prepared to compete for positions at higher levels.

Moving to the 0-8 level, the situation is only slightly better than at the 0-6 level. The residence SDE and advanced academic degree categories are the highest of all three, at 15.2% and 60.9% respectively. Yet, the numbers are still substantially lower than would be expected for this level of strategic leadership. At the current rate, the 0-8 level has sufficient officers with residence SDE and advanced academic degrees to meet the number of 0-9 positions available – approximately three. However, officers at this level are serving in positions that operate at the highest levels of strategic thinking, and they should have the requisite education to support them at this level, and therefore a target of 100% would not be unrealistic.

Overall, the utilization of professional development appears to be negligible in preparing senior leaders in the Air National Guard. There are some positive indications in the 0-6 level; however, these are off-set by the significantly negative indications in the 0-7 categories. These findings are based on the aggregate numbers for one year, which only give a snapshot look at the professional development of the senior leaders. The next step is to look at trends in professional development.

**Residence SDE Analysis**

Professional military education is instrumental in developing “strategically competent leaders,” with attending a residence SDE program being of particular importance.\(^\text{13}\) The SDE program focuses on continuing and broadening the strategic context of the preceding PME courses, with the residence courses providing an opportunity to conduct

in-depth and rigorous research in strategic issues. The nonresidence program builds on the strategic knowledge of a senior leader, but the value of targeted research of a residence SDE program adds a meaningful dimension in the development of strategic thinking skills. Furthermore, the residence program provides interaction opportunities to develop relationships with fellow senior officers that cannot be matched in the nonresidence program or in the seminar format.

The data on senior officers completing residence SDE programs over a five-year period reveals a consistently negative trend (Table 2). At the 0-6 level, the numbers are relatively stable with a slightly negative trend of just over a 1% variance in the last five years. This category has consistently exceeded the baseline of 76, which was established above, meeting the production capacity necessary to maintain a “bench” of qualified strategic thinkers. The trend suggests there has been a constant flow of officers going through residence SDE who are either already 0-6s or are subsequently promoted to 0-6. This flow should maintain a sufficient bench for promotion to 0-7. It appears there is a small group of officers who consider residence SDE valuable and important for advancement, which is supported by the ANGSLFD survey that found 16% (140) of the participants indicated residence SDE was “most beneficial to senior leaders”. These two findings are indicators of the weak support for residence SDE.

The ANGSLFD survey provides two additional indicators of the opinions of senior Air National Guard leaders regarding SDE. The survey found 54% (464) supporting a combination of residence and nonresidence SDE and 70% (599) agreed that Air National Guard senior leaders need the same “…educational experiences as their active duty and AF Reserve Component counterparts.” However, though many

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14 Smith, Expeditionary Leaders, 41.
15 DRC, ANGSLFD Survey. 28.
16 DRC, ANGSLFD Survey. 28 & 37.
support a combination approach to SDE, there is no vehicle by which to accomplish it, making the question and the finding irrelevant. As for those supporting similar educational experiences, the finding may be spurious in that those completing the survey may not have been aware of the educational experiences of RegAF and AF Reserve senior leaders.

Table 2: Percentage of officers with residence SDE for FY07 thru FY11. Numbers in ( ) are actual.

<table>
<thead>
<tr>
<th>Rank</th>
<th>FY07</th>
<th>FY08</th>
<th>FY09</th>
<th>FY10</th>
<th>FY11</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-8</td>
<td>8.3%</td>
<td>12.2%</td>
<td>16.3%</td>
<td>14.0%</td>
<td>15.2%</td>
</tr>
<tr>
<td></td>
<td>(4)</td>
<td>(5)</td>
<td>(7)</td>
<td>(6)</td>
<td>(7)</td>
</tr>
<tr>
<td>0-7</td>
<td>19.5%</td>
<td>13.6%</td>
<td>9.5%</td>
<td>9.9%</td>
<td>8.0%</td>
</tr>
<tr>
<td></td>
<td>(22)</td>
<td>(15)</td>
<td>(10)</td>
<td>(11)</td>
<td>(9)</td>
</tr>
<tr>
<td>0-6</td>
<td>9.0%</td>
<td>7.5%</td>
<td>7.9%</td>
<td>7.8%</td>
<td>7.9%</td>
</tr>
<tr>
<td></td>
<td>(81)</td>
<td>(72)</td>
<td>(78)</td>
<td>(78)</td>
<td>(77)</td>
</tr>
</tbody>
</table>

Source: Adapted from MilPDS Data from NGB/A1DL.

The 0-7 and 0-8 ranks show inverse trends. The 0-7 trend is significantly negative, dropping from a high of 19.5% in FY07 to a low of 8% in FY11, while the 0-8 trend is significantly positive, going from 8.3% to 15.2% during the same time. This trend could be interpreted as more 0-7s moved into 0-8 positions; however, this is not likely because the 0-8 population increases do not correlate with the 0-7 decreases. Most likely the 0-7 decreases can be attributed to retirements, with only a few moving into the 0-8 positions each year, maintaining the status quo.

Overall, the data shows there is a persistent downward trend for both the 0-6 and 0-7 ranks, indicating fewer senior officers have residence SDE now than did in the past. This trend clearly supports the main hypothesis of this paper – that the Air National Guard professional development opportunities are not being efficiently utilized to prepare senior officers with the requisite strategic thinking skills. Ultimately, the inefficient use of professional development can potentially restrict
opportunities for Air National Guard senior officers to serve at the highest levels of strategy and policy-making because of a perception among civilians as well as other officers that they are intellectually unprepared.

Residence SDE is not the only way to educationally develop strategic thinking skills. Advanced civilian education is another option. For the senior leader, a graduate-level civilian education provides an added dimension to the development of strategic thinking skills and provides an opportunity for interaction with civilian counterparts.17

**Advanced Academic Education Analysis**

Civilian advanced academic degrees provide another option for developing strategic thinking skills but tend to be an under-utilized opportunity. Unlike residence SDE, which is military specific, civilian advanced academic degrees provide a broader perspective of strategic issues, often having a blend of political, social, and economic curriculum. Another aspect of civilian advanced education is the self-directed nature of the learning. Most often an advanced degree is completed during off-duty time and at personal expense; however, there are a few exceptions such as military sponsored civilian education opportunities. As part of a comprehensive professional development program, civilian education exposes the military strategic thinker to concepts and ideas that help them relate to their civilian counterparts.18

An analysis of the data on senior officers who have completed an advanced academic degree reflects only an incremental change over the last five years (Table 2). At the general officer ranks, the numbers have

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had only a slight variation, with an overall negative trend in the 0-7 category.

Table 3: Percentage of Officers with Masters-level or Higher Degrees for FY07 thru FY11. Number in ( ) are actual totals.

<table>
<thead>
<tr>
<th>Rank</th>
<th>FY07</th>
<th>FY08</th>
<th>FY09</th>
<th>FY10</th>
<th>FY11</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-8</td>
<td>56.3%</td>
<td>53.7%</td>
<td>58.1%</td>
<td>65.1%</td>
<td>60.9%</td>
</tr>
<tr>
<td></td>
<td>(27)</td>
<td>(22)</td>
<td>(25)</td>
<td>(28)</td>
<td>(28)</td>
</tr>
<tr>
<td>0-7</td>
<td>56.6%</td>
<td>55.5%</td>
<td>46.7%</td>
<td>52.3%</td>
<td>53.1%</td>
</tr>
<tr>
<td></td>
<td>(64)</td>
<td>(61)</td>
<td>(49)</td>
<td>(58)</td>
<td>(60)</td>
</tr>
<tr>
<td>0-6</td>
<td>58.7%</td>
<td>59.2%</td>
<td>60.2%</td>
<td>60.2%</td>
<td>60.5%</td>
</tr>
<tr>
<td></td>
<td>(528)</td>
<td>(566)</td>
<td>(594)</td>
<td>(600)</td>
<td>(587)</td>
</tr>
</tbody>
</table>

Source: Adapted from MilPDS Data from NGB/A1DL.

The numbers are virtually stagnant, except the 0-6 category which has increased by 59 advanced degree holders since FY07. This increase, however, is a negligible 1.8% of the population.

Senior officers holding a low opinion of advanced academic degrees could be a major factor in relatively few officers completing such degrees. The ANGSLFD Survey of 0-5s through 0-9s found only 53% (452) of those surveyed thought an advanced degree would “enhance the effectiveness and success of future ANG senior leaders.” If the senior leadership does not see advanced academic degrees as important and valuable, then subordinates will not either.

Most residence SDE programs confer an advanced degree, and the increases seen in the 0-6 rank may simply be a by-product of residence SDE attendance. The 0-6 category of advanced academic degrees are not translating into an increase at the 0-7 level, thereby depreciating the value of pursuing an advanced academic degree.

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19 DRC, ANGSLFD Survey. 17.
Overall, the data shows there is a persistent negative trend in the number of advanced academic degrees in the general officer ranks, with only a slightly positive trend in the 0-6 category. As with the residence SDE, this trend supports the main hypothesis of this paper – that the Air National Guard professional development opportunities, in the way of advanced academic degrees, are not being efficiently utilized to develop the strategic thinking skills of the senior leadership.

**Summation of Data Analysis**

The statistical and survey data presented provide a bleak assessment on the utilization of residence SDE and advanced academic degrees to prepare senior leaders for strategic positions at the highest levels. In this study, the statistical data presents the current state and the past trends in residence SDE utilization and self-development through advanced academic degrees. These two activities are the predominate methods for developing strategic thinking skills in the Air Force. They are therefore important in the development of strategic thinkers in the Air National Guard.\(^\text{20}\)

The data reveals the current state of preparation (Table 1) is low, with only 10.4% of the senior leaders equipped with residence SDE and 58.2% with an advanced academic degree. The trends (Table 2 and 3) indicate an overall negative tendency over the past five years, with only a slightly positive trend in 0-6 advanced academic preparation. Additionally, the 0-6 bench is at capacity, but it is not translating to increases at the 0-7 level. This means that the 0-6s are participating in professional development, but the 0-6s with residence SDE are not being selected for promotion as frequently as those without residence SDE.

The findings from the analysis of the MilPDS data are further supported by the ANGSLFD Survey conducted in 2004. The survey

found weak support for participation in residence SDE as a way to prepare future leaders, with only 16% indicating it was “the most beneficial” PME method.\textsuperscript{21} This number is not much higher than the number attending residence SDE (10.4%).

Additionally, the survey found only 53% of the participants thought an advanced academic degree would “enhance the effectiveness and success of future ANG senior leaders.”\textsuperscript{22} Again, this number is close to the 58.2% that MilPDS reported had completed some type of advanced academic degree.

The combination of the MilPDS data and the ANGSLFD Survey provides a sense of the utilization of professional development opportunities to develop strategic thinkers in the Air National Guard. Overall, the findings from both sources are discouraging because they show a lack of appreciation for residence SDE and advanced civilian education as avenues to prepare for strategic leadership. The next chapter looks at the implications of the trends, provides several recommendations on ways to grow the “bench” of strategic thinkers, and addresses some of the limitations of this study.

\textsuperscript{21} DRC, \textit{ANGSLFD Survey}. 28.
\textsuperscript{22} DRC, \textit{ANGSLFD Survey}. 17.
Chapter 4
Future of Air National Guard Strategic Thinkers

There is nothing more difficult to carry out, nor more doubtful of success, nor more dangerous to handle, than to initiate a new order of things.

-- Niccolo Machiavelli

As mentioned earlier, Gen McKinley, CNGB, has stated he committed “to ‘build(ing) a bench’ of future leaders who are ready to step into key positions as needs and opportunities arise.”\(^1\) The definition of the “bench” was further clarified by Lt Gen Wyatt, DANG, during an interview for this study, when he expressed that developing strategic thinkers is integral to developing the bench.\(^2\) Their focus on developing a “deep bench” is directly related to the last implication identified by this study – a negative impact on the Air National Guard’s influence in the DoD.

The analysis of the data provided several key findings to support the hypothesis of this study – that professional development opportunities have not fully been utilized to prepare senior officers with the requisite strategic thinking skills. This, in turn, has had a detrimental effect on the Air National Guard’s ability to provide “ready and qualified” general officers for the Total Force. The future of the Air National Guard’s influence and representation at the highest levels of leadership are dictated by the quality and capabilities of the senior officers serving in key positions.

This study is not advocating that the current general officers are not strategic thinkers, nor that they are not qualified for the positions

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1 Gen Craig R. McKinley, Chief, National Guard Bureau, to The Adjutants General of all states, Puerto Rico, the US Virgin Islands, Guam, and the Commanding General of the District of Columbia, memorandum, 30 July 2010.
2 Gen Harry Wyatt, (Chief, Air National Guard), interview by the author, 6 May 2010.
they are currently assigned. It is not saying that every senior leader at every level must have residence SDE and an advanced academic degree to be effective or a strategic thinker. This study is about maximizing the value of available residence SDE and slots for the Guard and civilian graduate-level education. Residence SDE and advanced academic degrees are two of the best methods available to prepare officers to think strategically and to prepare them for the highest level of leadership.

Building on the statistical analysis of the last chapter, the next section focuses on the implications of the findings and provides several recommendations for the future. Additionally, the limitations of this research are presented and suggestions for further investigation are provided.

**Implications of the Findings**

Three key implications of the data presented in this study are put forth as having a long-range impact on the preparedness and performance of senior leaders in the Air National Guard. First, a continued downward trend in residence SDE and advanced academic degrees among general officers; second, an inadequate “bench” of strategic thinkers who are prepared to fill senior leader positions; and third, a potential decline in the Air National Guard’s influence and representation within the DoD stemming from senior officer preparation and credentials.

**Implication #1 – Intellectual Preparation is Slipping**

Fewer senior Air National Guard leaders completed residence SDE and have an advanced academic degree. This is not to say fewer officers are participating in residence SDE or completing advanced academic degrees. It does imply that that many of those serving in senior leadership positions have not had honed their strategic thinking skills through residence SDE or an advanced degree.
In the corporate world, the perceived value of the academic aspects of professional development are reinforced and modeled by the senior leadership. Senior Air National Guard leadership needs to encourage and educate officers on the value of residence SDE and advanced academic degrees and how they benefit the Air National Guard and the Total Force. More importantly, if senior leaders is convinced that the strategic thinking taught by SDE is important, they should select individuals for key leadership positions who have engaged in academic professional development, thereby establishing a model of what is expected of strategic thinkers and future leaders.

**Implication #2 – Lack of Growth in the “Bench”**

Further exasperating the downward trend identified above is the stagnant growth of the “bench” of strategic thinkers prepared to move into higher levels of leadership. The “bench” is actually three different levels. The first level is composed of those 0-6s who have engaged in professional development as identified in AFDD 1-1 and have attended residence SDE or completed an advanced academic degree. The 0-7 and 0-8 benches should have progressively higher concentrations of officers with residence SDE and advanced academic degrees.

However, as was mentioned in Chapter Three, the data implies this is not the way it is working. The 0-7 category shows a consistent downward trend over the five-year analysis. Although the 0-6 level has maintained an adequate pool of officers with the requisite residence SDE and/or advanced academic degrees, the numbers are dwindling slowly. The implication is the “bench” is shrinking and will continue to do so,

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based on the current practice of not selecting those equipped as strategic thinkers for promotion.

**Implication #3 – Diminishing Influence and Representation**

The Air National Guard has come a long way in the last two decades, moving from being viewed simply as a strategic reserve to also being recognized as an operational force. On the tactical and operational levels, the Air National Guard has become a valued partner in pursuing the global mission of the United States Air Force. The Air National Guard senior leaders are well trained and prepared to meet the tactical and operational aspects of the mission at both the federal and state level.

Conversely, the focus on developing strategic-level capabilities the leadership has not kept up with the emphasis on tactical and operational capabilities, particularly in the area of preparation through professional development. Lt Gen Wyatt echoed this sentiment, stating, “Our structure in the Air National Guard forces us to focus more on the technical and tactical aspects of our business than on the strategic elements.”

Referring back to the function and the framework of Chapter Two, many senior leaders are prepared for the missions of their organization but have not been equipped to operate at the highest levels of the framework, or “structure” as Lt Gen Wyatt called it. The danger of not fully developing the strategic-level capabilities of senior officers is that they will not be equipped to fill the higher-level strategic positions in and outside of the National Guard Bureau, resulting in fewer opportunities for Air National Guard representation throughout the DoD.

The challenge is to invest in strengthening the strategic-level capabilities of current and future senior leaders, just like the tactical and operational areas have been over the past two decades. However, it must

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Wyatt, interview.
and can be done in a much shorter timeframe. If the Air National Guard fails to have sufficient numbers of strategic thinkers ready to fill vacancies within the DoD that could go to Air National Guard officers, those positions will be filled by other organizations resulting in diminished influence and representation for the Air National Guard.

**Recommendations**

To say there is a need for strategically thinking senior officers in the Air National Guard is one thing, to show a way to achieve it is another. This section posits three overarching recommendations to develop a “bench” of strategic thinkers at the senior leader level. The first recommendation is to modify the existing force development plan in regards to governance and composition. Second, expand the number of residence educational opportunities for developing strategic thinking skills. Third, employ a targeted selection method for the residence SDE program based on the promotion selection process.

**Recommendation #1 – A Team Approach to Professional Development**

The first step in any initiative related to professional development is to create a process for identifying, selecting, and developing potential leaders that exhibit strategic thinking skills. As mentioned in Chapter One, in the corporate world there are numerous examples of highly successful professional development programs that had large, full-time staffs as well as ones with small decentralized part-time management. The Air National Guard Strategic Planning Systems (SPS) Steering Committee is attempting to replicate a blend of these examples, through creating a committee-approach for managing professional development and identifying the key professional development objectives.  

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6 *Air National Guard Strategic Plan, 7.*
In 2010, recognizing the shortfalls in officers prepared to operate at higher levels of leadership, the SPS Committee established a goal of implementing a process designed to develop a “bench” of strategic thinking Air National Guard officers. The focus is to develop officers “to meet opportunities for key leadership positions at combatant commands (COCOMs), HQ Air Force (HAF), major commands (MAJCOMs), the National Guard Bureau (NGB), and Joint Force HQ-State.”7 Like the corporate examples, the SPS Committee’s plan is to identify, qualify, and engage officers at all levels and help them prepare for greater levels of responsibility. A comprehensive officer professional development program is important to growing the “bench”, but this study deals with the academic aspects of development at the senior officer level, focusing mainly on the 0-6 through 0-8 levels.

There are three steps to the recommendation to round out the SPS professional development program. First, the proposed SPS program and committee should be retained under the auspices of the SPS Committee. The second step focuses on the professional development committee’s capabilities and composition. Finally, the committee needs to implement a system for tracking candidates entering into the strategic development program and monitoring their progress to the 0-8 level.

As seen in the corporate examples, highly effective executive development programs are endowed with senior leadership involvement on a multitude of levels. For this reason, the proposed SPS program and committee should be retained under the auspices of the SPS Steering Committee. By retaining the ownership of the process, the SPS Committee brings several distinct positional advantages to the program. First, the advantage is local influence. The SPS leaders are predominately at the Joint Force HQ-State level, serving in the Assistant Adjutant General-Air role and are able to directly influence the

7 *Air National Guard Strategic Plan*, 7.
professional development efforts within their states and territories. The second advantage is influence at the Air National Guard level. The SPS members work closely with the DANG and the National Guard Bureau’s headquarters staff, enabling them to engage at the national and state levels. Lastly, many of the members of the SPS Committee are assigned to the “dual-hat” positions mentioned in Chapter Two, serving alongside active duty general officers who are engaged at the highest levels of strategy within the Air Force. These connections can help open doors for Air National Guard strategic thinkers to gain valuable strategic-level experiences and pursue opportunities not previously available to them.

Second, the professional development committee should be composed of individuals who understand strategic thinking and are familiar with the function and framework of the Air National Guard. Some have observed that many military officers have trouble transitioning from the tactical to the strategic realm. Committee members should be able to determine who will be able to make the transition. To do this, the committee members should be in positions that facilitate observation and interaction with the officers moving through the professional development program. In addition to the SPS committee representation the committee might include the Air University Air National Guard liaison, a senior leader from the Air National Guard Readiness Center, and a senior officer from the General Officer Management Office (GOMO). These individuals are in positions to help guide officers through the academic and staff challenges they might face while in the development process. Additionally, these individuals are familiar with the function and framework of the Air National Guard. Their perspective of the interdependence between the national and state levels can help the committee understand the needs of the organization.

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and the strategic thinker’s place in the system – getting the “right people” to the “right place.”

The third step for the professional development committee is to implement a management system for monitoring candidates entering into the strategic development system and tracking their progress. The management system does not have to be elaborate. Its purpose is to track individuals that are being prepared for future leadership opportunities. The purpose of the professional development program is to “build a bench.” It is incumbent on the committee to be able to provide feedback on the development efforts of those in the program. Additionally, the management system should allow the committee to gauge the extent to which residence SDE slots are being allocated to the officers that are most competitive for promotion. A by-product of the management system is that it would communicate to those who have agreed to enter the development program that they are expected to move into senior leadership positions in or out of their home state, based on the needs of the Air National Guard.

**Recommendation #2 – Expanding Opportunities for Development**

The statistical analysis for FY11 found that 77, or 8%, of the colonels in the Air National Guard have completed residence SDE and only 60% have an advanced academic degree. At the next level (0-7), less than 8%, or 9 of the 113, brigadier general positions have completed residence SDE and only 60 have an advanced academic degree. An obvious way to grow the bench of strategic thinkers is to increase the number of residence SDE slots allocated to the Air National Guard and to get more officers to pursue advanced academic degrees. Additionally, incorporating other advanced studies programs that are designed to build strategists can further facilitate the development of strategic thinkers within the Air National Guard.
As mentioned earlier, the Air National Guard has historically received 21 school slots for residence SDE. The quotas are broken down as follows:

<table>
<thead>
<tr>
<th>Institution</th>
<th>Quotas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air War College</td>
<td>7</td>
</tr>
<tr>
<td>Army War College</td>
<td>3</td>
</tr>
<tr>
<td>Industrial College of the Armed Forces</td>
<td>3</td>
</tr>
<tr>
<td>Inter-American Defense College</td>
<td>1</td>
</tr>
<tr>
<td>Lean Aerospace Initiative Fellowship – MIT</td>
<td>2</td>
</tr>
<tr>
<td>National Security Fellowship – Harvard</td>
<td>1</td>
</tr>
<tr>
<td>National War College</td>
<td>1</td>
</tr>
<tr>
<td>Naval War College</td>
<td>2</td>
</tr>
<tr>
<td>Secretary of Defense Corporate Fellowship</td>
<td>1</td>
</tr>
</tbody>
</table>

There are several other residence SDE opportunities that occasionally take Air National Guard officers, such as Joint Advanced Warfighting School (JAWS), which rotates between the Air Force Reserve and the Air National Guard. In addition, there are advanced studies programs that provide an in-depth education in strategic thinking, like the Air Force’s premier strategy course - the School of Advanced Air and Space Studies (SAASS). Each sister service has a similar program designed to educate strategic thinkers. These include the Army’s School of Advanced Military Studies (SAMS), the Marine Corps’ School of Advanced Warfighting (SAW), and the Navy’s Maritime Advanced Warfighting School (MAWS). These programs are more rigorous than most SDE programs but are not SDE.

Currently the Air National Guard only participates in the SAASS program, receiving one quota a year for SAASS. In academic year 2012 (AY12), the Air National Guard has two slots, and the school will offer a follow-on PhD program that will bestow residence SDE credit. It behooves the Air National Guard to investigate ways to take advantage of
this opportunity because of the three-fold return on investment – advanced strategic thinking education, residence SDE completion, and a terminal advanced academic degree.

Quotas should be pursued in the other advanced studies programs as a way to expand the opportunities for developing strategic thinkers in the Air National Guard. Furthermore, graduates of these programs should be tracked as part of the professional development program.

Based on the quota allocation, the Air National Guard is maintaining an adequate number of 0-6s with residence SDE and should be able to continue this trend. This is largely dependent on the number of 0-6s promoted to 0-7 during a fiscal year. For example, if the number of 0-6s, with residence SDE, promoted to 0-7 exceeds the 21 SDE slots available then it would cut into the 0-6 bench. However, based on past trends this is very unlikely since the migration from 0-6 to 0-7 is very small.

Regardless, promoting strategic thinking 0-6s, who have the requisite education, should be the priority. The purpose of the professional development program is to increase the number of general officers that have had residence SDE and an advanced academic degree. If this creates a dilemma about how to build the bench at the 0-7 level while maintaining an adequate 0-6 bench, there are solutions. There are two ways to benefit from increasing the overall opportunities of residence SDE, either using the quota increase for both 0-5s and 0-6s or strictly for 0-6s in order to boost the candidate pool.

Increasing the quotas which are set by the Air Force is unlikely given the budget climate. However, there could be some room for creating more quotas at institutions such as the Air War College and the Marine Corps War College. An increase to 26 slots a year, whether it is for all eligible or just for 0-6s, will greatly improve the overall level of strategic thinkers in the Air National Guard. Concurrently, the increase
could translate into a significant growth in the 0-7 bench, dependent on the select of 0-6s with residence SDE.

Ultimately, the only way to increase the depth of the 0-7 and 0-8 bench is to promote 0-6s that have the requisite education. The 0-6 candidate pool for promotion to 0-7 has the capacity, but the question is does it have the “right people” with the “right training” for the “right position”? Individuals who have been educated in strategic thinking methods are not being promoted.

**Recommendation #3 – Residence SDE based on Promotion Selection**

This study asserts that developing a deep bench depends on senior leaders having the strategic thinking traits and skills, developed through educational experiences such as residence SDE and advanced academic degrees. The findings indicate there are a sufficient number of 0-6s with the educational background, but few of them are being selected for promotion to 0-7. This indicates a mismatch between those 0-6s chosen to receive the education and those chosen for future leadership positions. If this is the case, then the Air National Guard has invested time and resources in the wrong place – indicating a problem in the selection process.

This study suggests basing the selection for residence SDE on nomination for promotion to 0-6 or 0-7. In the Air National Guard promotions process an officer is nominated for promotion to the 0-6 or 0-7 rank. The nomination goes through several review panels and, if recommend, is ultimately forwarded to the DANG for senate nomination. The process is similar for 0-5s nominated for promotion to 0-6 and for 0-6s to 0-7. Using the promotion nomination process as a selection method for residence SDE provides a more efficient and effective process to send the right people to SDE. The logic behind this recommendation is that if an individual is selected for promotion, then they must be the
right person to educate in strategic thinking in order to get the greatest return on investment.

Implementing this process at the point where 0-5s are nominated for promotion to 0-6 has several challenges. For example, over 100 0-5s are nominated for promotion each year. With only 21 school slots, the program would not be feasible or viable because a system would have to be established to decide who to send. Additionally, it would preclude selecting 0-6s to attend SDE, resulting in a slowdown in the development of the bench. At this point, there are sufficient 0-6s with residence SDE to absorb the impact of a change in policy. However it could take up to three years before the system would recover. On the other hand, the 0-5 group has the most to benefit from learning strategic thinking concepts, in that they are moving into senior leader positions. Once the system has adjusted to the change, there is a greater chance of increased benefit to the entire process in the long run, with more 0-6s equipped with strategic thinking skills earlier in their career.

If the implementation point is at the 0-6 level, and every 0-6 nominated for a 0-7 position was assigned to attend residence SDE at the next opportunity, the number of strategic thinkers would increase exponentially in the shortest amount of time. These individuals are projected to be general officers; therefore it is an immediate return on investment from the SDE program.

The drawbacks to such an approach are similar to the 0-5 recommendation. First, using all of the SDE quotas for 0-6s would have a negative impact on the preparation of 0-5s for senior positions, resulting in a capabilities gap at the 0-6 level. Second, like the 0-5 recommendation, there are more 0-6s promoted each year than there are school quotas available. Determining who will and will not have the opportunity to attend SDE would become a problem but is not unmanageable. Finally, unlike the 0-5 recommendation, a situation could arise where an individual might be promoted while they are
attending SDE. It is unlikely this would happen but it is possible. The best solution may be to employ a blended approach providing quotas for both the 0-5 and 0-6 promotees, thereby protecting against the lag in production over the next couple of years and the potential gap in the out years.

Building on the first benefit, the second primary benefit of this recommendation is that it reinforces the importance of strategic thinking and making the intellectual transition from tactics and operations to strategy. Helping future senior leaders to move from the tactical and operational levels to the strategic realm lays the groundwork for their future roles as leaders at the highest levels of strategy and policy-making. Developing strategic thinkers is a long and arduous process, involving education, experience, and time. Helping future leaders understand the transition in their roles is part of the focus of SDE and builds the esteem and prestige of the general officer corps within the Total Air Force structure. Residence SDE equips senior leaders with the skills they need to effectively lead the Air National Guard in the future.

**Conclusion**

As mentioned in Chapter One, strategic thinkers are individuals who manifest and employ the “intellectual powers” as defined by Clausewitz. They are a combination of innate traits and developed skills that enable a person to serve at the highest levels of leadership – even to the point of Clausewitz’s “statesman.”

Strategic thinkers learn from many avenues, with the academic environment being just one element of their development process. However, for the military professional, one of the best environments is

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9 Watts, *Strategic Competencies*, 52.
through residence SDE because of the focus on military strategy and concepts. Another venue is through advanced academic degrees from civilian institutions, where focusing on an individual’s area of military expertise or in strategic studies can contribute significantly in developing the strategic thinking of a military professional.\(^\text{12}\) Engaging in a civilian advanced academic program on his or her own time reflects positively on an officer’s self-development efforts and desire to take on greater responsibility. In concert, residence SDE and an advanced academic degree facilitate the transition from the hands-on tactical and operational levels of action and planning to the cognitive realm of strategic thinking.

The question this research attempts to answer is - are the senior officers of the Air National Guard Officers equipped to engage at the highest levels of military strategy and policy-making? It also puts forth the hypothesis that the Air National Guard professional development opportunities have not been fully utilized to prepare senior officers with the requisite strategic thinking skill, thereby hindering the organization’s ability to provide “ready and qualified” general officers for the Total Force.

As with any study there are limitations to what can be researched and presented effectively; such is the case with the topic of professional development. As AFDD 1-1 explains, professional development encompasses a multitude of experiences, training, and education.\(^\text{13}\) This research focuses specifically on the academic aspect of professional development as related to the senior leadership of the Air National Guard. It does not focus on research in operational experience, command, and civilian work experience but suggests it as an area of further research. Another limitation is the evaluation of PME and the value and variance between programs and sister services. There are


\(^{13}\) AFDD 1-1, *Leadership and Force Development*, 33-34.
numerous other topics that could and should be researched, but this study focused on developing strategic thinkers through educational opportunities.

The data suggests that the Air National Guard could have better equipped many of our senior officers to engage at the highest levels of military strategy and policy-making. Professional development opportunities have not been efficiently allocated.

These problems are not endemic to the Air National Guard alone. The US military struggles with developing strategic thinkers. Numerous reports, from the Skelton Panel in 1989 to the 2010 Senate Arms Committee report on Professional Military Education, have attempted to resolve this.\textsuperscript{14} For the Air Force, Gen Ryan attempted to solve this through his Developing Aerospace Leaders initiative in 2001, which though short lived did produce AFDD 1-1 as a comprehensive guide on force development.\textsuperscript{15}

Fortunately, the Air National Guard may be the one organization that will overcome the obstacles that have confronted the others. The Air National Guard does not have to deal with some of the issues that confront active duty officers, such as moving from one duty station to the next. Furthermore, Air National Guard officers have civilian experience to draw upon.\textsuperscript{16}

If the recommendations of this study are adopted, in whole or in part, the Air National Guard will grow a deep bench of strategically minded general officers, strengthening the framework and reinforcing the function of the organization. Furthermore, the Air National Guard’s influence would span the DoD through a cadre of senior officers better

\textsuperscript{14} House. \textit{Another Crossroads? Professional Military Education Two Decades after the Goldwater-Nichols Act and the Skelton Panel}, Committee on Armed Services Subcommittee on Oversight & Investigations. April 2010.

\textsuperscript{15} Smith, \textit{Expeditionary Leaders}, 31-33.

equipped to engage in strategic discussions on the national and state levels. The Air National Guard has proven its capacity to excel in the tactical and operational arenas. It is now time to funnel those same energies into becoming the strategic thinkers for the Total Force.
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