



**ESTABLISHING A COMMUNICATIONS OFFICER
FORCE DEVELOPMENT PROGRAM**

GRADUATE RESEARCH PROJECT

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AFIT/IC4/ENG/06-04

**DEPARTMENT OF THE AIR FORCE
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*To my wife, who patiently stood by me during the
5 months I worked on this project—I could not have accomplished
this research without your undying support and love...*

Abstract

Senior Air Force leaders tout its Airmen as its most important asset. Nonetheless, when it comes time to put words into actions, Airmen take a backseat to acquisition programs, Battle Dress Uniform (BDU) uniform redesigns, and fitness uniform procurement. In 2003, the Air Force launched the force development program—and yet it still has not produced the momentum and facts-based results emphasized in the worldwide fan-fare in 2004. Air Force Doctrine Document (AFDD) 1-1, *Leadership and Force Development* doctrine explicitly outlines the underlying themes of force development: experience, skills, training, education, and performance feedback, to name a few. However, the Air Force has not instituted the structure, supplied the resources, or mandated the governance to make the program a successful one. Yet, in every sight picture, senior briefing, leadership articles, Quadrennial Defense Review (QDR), flight plans, and transformation plan, people constantly read about how force development is transforming the Air Force and its people. This is not the case, as there's a disparity between force development strategy and intent, and the implementation and execution of the program. The program, as a whole, is not working in today's Air Force.

To illustrate the deficiencies, I've dissected the communications officer force development initiatives and provided examples, and developed actions for leadership to take to implement a Communications Officer Force Development Program. The program encompasses career field strategy, career field management, competencies management,

development processes, and metrics. The result is a fully comprehensive career field program that institutes force development concepts outlined in AFDD 1-1. In describing the career field force development program, this research paper uncovers critical deficiencies with the communications career field force development initiatives as well as the Air Force's program—and outlines solutions that can be implemented as a program. Bottom line, this research paper proposes a blueprint for the Communications Officer Force Development Program!

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ESTABLISHING A COMMUNICATIONS OFFICER FORCE DEVELOPMENT PROGRAM

I. Introduction

Purpose

The purpose of this paper is to construct a Communications Officer Force Development Program that institutes key force development facets as outlined in AFDD 1-1, *Leadership and Force Development* doctrine. The intent is to provide the communications officer career field leaders with a force development blueprint that they can implement in order to remedy the current institutional deficiencies associated with the current force development program.

General Issue

The communications officer career field does not have a force development program as stated in AFDD 1-1, *Leadership and Force Development* doctrine. Currently, there is no governance, career field strategy, force development program, career management plan or process, or measurements of progress. The career field training, though comprehensive and solid as individual courses, provides no overarching theme or mechanism in deliberately developing the career field officers. The career field does not track officer competencies or skills, or training to properly evaluate their officer's current skill level or future potential to handle increased career field responsibilities. Furthermore, officers are arbitrarily assigned to new positions based upon agency levels

and types versus potential career paths, developmental potential, and competencies.

RAND even cited that the communications assignment team is great at tactical level tasks of assigning officers to positions, however the career field as a whole lacks the overall operational and strategic level planning necessary to govern and manage career field development objectives. As a consequence, the overall issue is that the communications officer career field lacks a comprehensive career field force development program—one that deliberately develops its officers from accession through to separation or retirement.

Scope

According to AFDD 1-1, force development covers the entire spectrum from doctrine, strategy, processes, measurements, education, training, performance reporting, to leadership responsibilities. In order to capture the whole essence of career field force development, I scoped this paper to cover the whole communications officer force development arena. It's far too important to the Air Force to get this correct and far too complex for inexperienced officers with no human resource management background to accomplish. This is the reason I took this project on, with limited time and resources—is to get it right and put the proper emphasis on certain aspects of force development. Therefore, the reader will encounter a thorough and candid scrub of the current communications officer force development initiative and be introduced to a comprehensive career field force development program that can be used within the communications officer career field as well as Air Force wide. At times, I will theorize, pontificate, scrutinize, and other times, I will go deep into processes, providing answers to key career field issues. I hope I do it justice.

Outline

The outline is simple and straightforward. I lead off with the abstract. Currently, you're reading through the introduction. After the introduction, I'll provide you an Air Force Force Development overview and intent in section 2. Section 2 is designed to set the perspective for section 3, which goes in depth into the current communications officer force development initiatives. Sections 4 and 5 introduce the reader to current industry and governmental human resource trends and practices. I believe it's paramount to get a proper viewpoint of how other organizations in the world conduct their human resource management operations. Sections 2 through 5 provide the foundation for section 6, which goes into the proposed or new communications officer force development program. In this section, you'll be introduced to leadership responsibilities, key processes, management philosophies, and unit leadership actions. Accordingly, I'll share with you a new career field strategy that shows how the career field can continuously keep in touch with its environment. To demonstrate the strategy's process, I walk through it in sections 7 through 9—to depict the nuances and steps in defining the career field's capabilities, competencies, and then identifying performance gaps. In section 10, I introduce the reader to the concept of metrics and provide base line metrics for immediate use by leadership. Finally, I wrap up the paper in section 11 with a conclusion.

Background

There are several reasons behind why I conducted this research—and will continue to do so after this paper is submitted to Air Force Institute of Technology (AFIT). The first reason is that the Air Force has force development doctrine that leadership is not

implementing or executing. However, every article, briefing, sight picture, etc...I read states that leadership is managing its people accordingly. There seems to be a disconnect between what is written and briefed, and the actual implementation and execution. The truth needs to come out and be stated unequivocally—that we’re not doing what we’re saying we’re doing—as it pertains to force development execution.

The second reason is that the communications career field is not being managed as an asset, and even though there are good people trying their hardest to improve the career field—it must start at the top with career field governance and then flow down as a mandate. Moreover, the communications career field is at the cross roads—about to cut 59 percent of its officer workforce without a clear understanding of the career fields’ competencies, skills, or knowledge. Take the fact that the career field has no governance, no clear mandate, no clear understanding or knowledge of its competencies, no metrics or measurements to aid in the officer reduction, and no career field strategy or program—and leadership is inviting huge mission failures. How can leadership cut a career field without knowing its contents? This is a major reason for my research—to provide a forum or medium so the concerns of the career field can be heard by senior leadership.

And the final reason deals with the assignment process. In today’s communications career field, the Air Force Personnel Center (AFPC) communications assignment team assigns officers to positions based upon agency types and levels of jobs. Under this concept, an officer can go through a whole career being stove-piped in one facet of the career field while experiencing many different level agencies. For instance, an officer can work in many different organizations and be at many different levels performing

software engineering, and only software engineering. However, that officer will be stove-piped in software from a Lieutenant to Lieutenant Colonel without broadening or developing as a communications officer. Within the paper, I allude to assigning officers to positions under this concept as “playing checkers”—where every officer has the same moves. This old paradigm must be broken in order for officers to be assigned according to their current competencies, experience levels, and potential growth or developmental abilities. In this paper, I introduce you to the concept of managing officers according to competencies and skills versus the old way of doing business.

Research Methodology

I started my research 5 months ago, the week after Christmas 2005. In drafting my initial research approach, I decided to construct a research paper flow that would allow me to lay the foundation for a new communication officer force development program. That meant that I would have to build a foundation based upon the current Air Force Force Development Program. In doing so, I researched doctrine, transformation plans, QDR documents, RAND reports and General Accounting Office (GAO) reports, among other briefings and articles. These documents served as the foundation for documenting Air Force and communications force development along with interviews of personnel involved in the process. To support or contradict the Air Force’s intent and execution, I read approximately 50 books, 200 articles, 50 or so briefings, 30 Intercom magazines and many other journals to get a better perspective on military and civilian human resource management programs. More importantly, I researched industry and other government agencies that seem to be further along on the strategic human resource path than the Air

Force. This presented an excellent opportunity to gather knowledge and insight into other organizations' struggles with human resource management—and come to find out that we're all not different in that aspect. All organizations struggle with human resource management at some point in their existence—and we can learn from each other.

All the research and interviews provided me a foundation to build a new communications officer force development program. I used GAO reports, RAND reports, as well as 36 books and 72 articles to provide a foundation for the new program. As you'll see in the report, I borrowed pictures and diagrams from many published products to substantiate or clarify my thoughts on the new program and its components. I also took ideas from briefings and journals and incorporated their themes in my paper. However, I was careful to give credit and show the difference between others' thoughts and what could be considered original thought. Finally, I used many articles and books to refine measurements and metrics. In my research, I came to understand that some organizations and authors have the answers—as others stay confined to their organizations and never survey the environment or other organizations for answers. In this paper, I hope to present the deficiencies in the communications officer career field in order to develop a new program worthy of implementation. Again, the paper is long, and at times it gets deep into the processes; however I hope it reveals issues and provides solutions to the reader.

II. Air Force Force Development Program Overview

Force Development or otherwise known as employee development in the civilian sector is not a new concept. Companies have earned their live-blood on investing heavily in employee development for hundreds of years. This has not changed, though the manner in which companies approach employee development and human resource management has drastically changed. No longer do civilian companies look at their employees as an endless supply of manpower. They realize that their employees are the catalyst for a healthy and profitable organization—through their knowledge, expertise and skills. And with the downturn in skilled labor within the United States, these skilled employees are more valuable than ever. This is why any person can “Google” human resource management on the Internet and literally get thousands of companies who have laid claim to extraordinary human resource management practices. Even more common are the consultant firms who provide the services to lead other less fortunate companies to more efficient and effective human resource management programs.

As with the civilian sector, the military and the Air Force in general are looking to better methods in managing human resources. In November 2002, General Jumper, Air Force Chief of Staff at the time, released his human resource vision in a Total Force Development Sight Picture. In the AFPC’s *Development Team Member Handbook*, it highlighted General Jumper’s Sight Picture by stating, “The basic concept is simple: invest education and experience in our airman at all ranks and tie that together with job-related experiences in all career fields more deliberately than we do today, in order to better prepare for the future and better meet their expectations.”[1] The underlying

emphasis was placed on deliberately growing military members to meet future mission needs and it would require a transition in the way we execute human resource management.

Force Development Thrust

As alluded to in General Jumper's Force Development Sight Picture, the force development thrust is to deliberately develop the Air Force member to meet mission challenges. The Air Force Officer Force Development Briefing further states that force development has one common goal, "To continue developing professional Airman who instinctively leverage their respective strengths together." [2] The intent is to develop individual Airman or officers who in turn will work as a team with others to accomplish the Air Force and Department of Defense (DoD) mission. The emphasis lies with developing officers' competencies, skills and knowledge through institutional experiences, education and training. In Air Force Doctrine 1-1, *Leadership and Force Development*, it explicitly states that "People are the Air Force's most critical asset." [3] In essence, if the Air Force deliberately develops officers' competencies, skills and knowledge, the force can use those assets to meet current operations and future capabilities. With dwindling numbers (of people), increased missions, The Global War on Terrorism (GWOT), Operation Iraqi Freedom (OIF), and a multitude of other operations around the world, the Air Force is making a conscious and deliberate attempt to implement force development, a human resource strategy for our Airmen.

In October 2003, the Air Force unveiled its Force Development Plan to the service. The next month, leadership launched a world-wind tour of all commands and bases to

promote force development and how it would impact training, education and assigning people to meet mission challenges. [4] All this in the after math of the September 11th disaster, onslaught of Operation Enduring Freedom (OEF) and on the heels of OIF. And, a year-and-a-half earlier, in March 2002, the GAO fielded a hard-hitting report on Strategic Human Resource Management, which described the dreadful shortcomings of government human resource management. The report noted, “People are an agency’s most important organizational asset. An organization’s people define its character, affect its capacity to perform, and represent the knowledge-base of the organization.” [5] As busy an organization as the GAO is, if they took the time to research and report on human resource management, then that’s an indication of the importance of human resource management and subsequently, force development. To further reiterate the importance of force development, the GAO in an August 2004 report on Defense Space Activities, declared “We have identified strategic human capital management as a government-wide high-risk area and provided tools intended to help federal agency leaders manage their people.” [6] In this report, the GAO cited several cornerstones that undermined federal human resource management effectiveness to include human capital planning, talent development and measurements. They further elaborated on the facts that federal agencies lacked human resource planning mechanisms for determining critical capabilities, competency gaps, resource requirements and evaluation methods. [7] It’s obviously clear that the Air Force falls in this high-risk category along with other federal agencies that lack healthy human resource management characteristics.

Two years after the launch of the Air Force's Force Development Program, the GAO launched yet another report in April 2005, *Defense Management: Key Elements to Successfully Transform DOD Business Operations*, in which they stated that DoD needed to address many business operations, most notably its strategic human capital management which is on the GAO's list of 2005 high-risk programs that require urgent and fundamental transformation if the government is to function in an efficient manner.

[8] The Air Force, as an entity within the DoD has successfully outlined a force development plan and has paved the way to successfully implement the plan. However, the Air Force Force Development Plan has not met with the implementation rigor and enthusiasm as the initial presentation and rollout in 2003 – 2004 time frame. As an institution, the Air Force continues to struggle with oversight and standardization across the many career fields, as well as the implementation of Development Teams (DTs). On one hand, every sight picture, every article and every briefing on the Air Force's future, to include a briefing by Lieutenant General Brady, the Air Force Deputy Chief of Staff for Manpower and Personnel, *Building the 21st Century Force*, alludes to the fact that one of the Air Force's top priorities is developing its people—its most important asset. [9]

On the other hand, as an institution, the Air Force is not tracking competencies, skills, knowledge or experiences—vital practices that must be accomplished in order to deliberately develop Airmen. The disparity between saying the Air Force is developing its people and not deliberately accounting for the individuals' "genetics" leads to the conclusion that there's a disconnect between planning and execution—that will be depicted in the Communications Officer Force Development section.

This makes a person think, “why Air Force Force Development now?” We could have used it during the Cold War to logically account for the 600,000-person force and why we needed such a force. A force development plan could have aided the Air Force in identifying key competencies and most likely could have right-sized the force—allowing us to modernize weapon systems. We could have used a force development plan in the early 1990s during the initial drawdown that today, provides us the notorious “bathtub” effect in our officer manning numbers. A force development plan would have aided us in “fencing” off key competencies and knowledge—that walked out of the Air Force with crucial skills and abilities needed today. A 2004 RAND report, *Integrated Planning for the Air Force Senior Leader Workforce Background and Methods*, pointed to the fact, that in 1998, the Air Force Chief of Staff, General Ryan “observed a mismatch between the qualifications of Air Force general officers and some of the jobs they needed to fill.” [10] This prompted General Ryan to ask RAND to conduct research on the general officer development approach. Since general officers rise through the ranks, their development starts at a junior rank by developing them according to desired and required skills, abilities, education and experiences. In my opinion, this was the prelude to our current Air Force Force Development Program—and its intent.

In further discussing the concept of force development, it’s important to look at two foundational documents that provide the basis for the current program and its intent. The first document, AFDD 1-1, *Leadership and Force Development*, describes the underlying principles of force development. On page 13 of this document, it states, “Force Development will enable us to focus on each individual by emphasizing our common

Airman culture.” [11] By focusing on each individual, the Air Force understands that every Airman brings potential to the organization as a whole and is valued for their skills and abilities. In the doctrine’s introduction, it insists that leaders among airmen are created through a deliberate process of education and training, and seasoned with experience. [12] The other document is the Air Force’s *Transformation Flight Plan*, which states that “Force Development is grounded in doctrine.” [13] The flight plan unequivocally coincides with the RAND report requested by General Ryan, in that it suggests that officers should be developed at the tactical, operational and strategic levels, commensurate with their rank and experiences. As the officers transition to higher ranks, their skills evolve from career-field specific to much broader-focused skills aiding officers to serve in a more strategic fashion. According to the flight plan, this evolution occurs through individually tailored education and training—and implied experiences and increased skill sets. [14]

The Air Force has the force development doctrine and a flight plan that clearly draws an intent or thrust behind force development. But why now—of all times in our Air Force history do we start to scrutinize the way we develop our Airman? I surmise a crucial reason for senior-level focus on force development. The reason is that the Air Force and DoD is in a time of evolution and change, where leadership constantly grapples with future mission concepts. Today, an Airman can’t pick up an Air Force Times, read an Air Force article or review Air Force Link without reading the phrase, “Fly, Fight, and Win in Air, Space, and Cyberspace.” To accomplish this bold vision, leadership has to set a course in getting all Airmen thinking in a new mindset, not based

on threats, but based on warfighting capabilities. And, to develop and sustain capabilities, Air Force leadership needs to refocus its military personnel on developing their competencies and skills—through deliberate force development. [15] A GAO report from December 2004 on military transformation linked the two concepts of capabilities and force development when it stated, “Because of the uncertainties associated with the future threats...the Department of Defense (DOD) has embarked on a major effort to transform its business processes, human capital, and military capabilities.” [16] All three, transforming business processes, human capital and military capabilities are needed because the Air Force is not only facing increased and diverse missions, but according to Program Budget Decision (PBD) 720, dated 28 December 2005, the Air Force will cut an estimated 57,000 personnel between 2007 and 2011, mostly in the active duty military. [17] This cut or drawdown requires critical scrutiny and fervent concern from those of us who are career Airman and who deeply care for our branch of service and its application of warfighting support.

In closely examining PBD 720, it’s evident that Air Force leadership is downward directing manpower cuts based upon out-year projections—and then proposing that we reorganize our force structure and implement lean engineering to mitigate the risk of neglecting mission capabilities. [18] This proposed process is called downsizing, when in fact, we should take a lesson learned from the past and contemplate “rightsizing” our force based upon work breakdown structures and manpower competencies analysis. Two different agencies authored reports that addressed the subject of downsizing and linked it to force development methodology. In a GAO report from December 2003 on human

capital, the GAO references the Air Force's downsizing efforts in the early 1990s and cited the fact that 12 years later, the Air Force is still addressing skill shortages caused by that initiative. They further go on to state, "Such factors increase the need for agencies to engage in strategic workforce planning to transform their workforces so that they will be effective in the 21st century." [19] The other report is a 2005 RAND report on career field management approach, which asserts that the 1990s downsizing as well as crisis missions in the late 1990s and current ongoing missions have left the Air Force with severe manpower problems. It further highlights that fact that with increased technology, the Air Force will require myriad different skills to perform and meet mission requirements. [20] If two vastly different agencies made the same argument about a previous downsizing experience, shouldn't Air Force leadership heed the lesson and re-examine the method in which we downsize the force in this tumultuous time period. Even with the force development program entering its third year, the Air Force is not at the point where it can evaluate its Airmen's skill sets and competencies in order to make the educated decisions on manpower cuts. And, the Air Force should have learned from the past and understand that mandating cuts and then figuring out how to manage without the bodies is not the path any institution should take—especially one charged with the defense of a nation.

Force Development Execution

In the early days of force development, senior leadership marketed and sold the concept of development to Airmen through sight pictures, briefings, web pages and doctrine. Senior leadership directed a program that would ensure the Air Force would

have the right person, in the right place at the right time to accomplish the mission—where ever it was. It emphasized the fact that force development meant better development and utilization of the total force. [21] Furthermore, in the article, AF Unveils Force Development Plan, it stated, “What force development does is recognize their value, consider their expectations and provide them with the right skill set of skills to help them be the best they can at what they do.” [22] The underlying belief was that force development would allow senior career field leaders, mid-level leaders and Airmen at all levels to communicate in order to deliberately plan careers that best suited both the individuals and the mission. Force development is a great concept and is based on solid strategic human resource management principles practiced in the many successful companies in the world; however, the execution plan and subsequent execution falls considerably short of providing the marketed strategy and effectiveness.

The force development concept suggests the Air Force deliberately develops Airmen’s skills and abilities to accomplish the mission. For the officers, AFPC instituted DTs to review officer credentials and make career field vectors or paths. As documented in the *AFPC Development Team Member Handbook*, “DTs are responsible for overseeing officer development to meet functional community requirements and AF developmental objectives.” [23] The quintessential flaw, which is not stated in the handbook, is that DT requirements are not standardized or enforced across the career fields. From talking with myriad field grade officers in the past 4 months, very few career field DTs actually review the officer’s complete record when deciding their respective career path. From my understanding and research with former assignment team members and former force

development branch members, most DTs have very little time to accomplish their responsibilities as written in the DT handbook, and in lieu of a formal record review, basically scan the officer's SURF and Transitional Officer Development Plan (T-ODP)—in making career path vectors. Of more concern to many officers is the fact that the DT process seems quite political and if the officer is not known, supported or sponsored by a DT member, then adequate review and consideration is not given to the officer's career development. This also bleeds over into the school selection and command selection processes that will be addressed further in the communications force development section. The problem is further compounded by the fact most officers are not given feedback on why they were vectored in certain directions—as they only receive two to three vectors on their T-ODP. This brings to light that even if the developmental process produced effective results, that without candid and forthright rationale on why officers were vectored in certain areas—leaves doubt that DTs are expending the proper time and effort to deliberately grow officers. This isn't to say that there are some career-field DTs that are executing according to the intent of force development, however it is not standardized, tracked, nor enforced. As we downsize and the numbers decrease, we need to consider what Justin Menkes says in his book, *Executive Intelligence*, “It has been well established that the quality of an organization's people is the essential determinant of its success.” [24] If the Air Force is to continue its success, it must dedicate the time and resources to developing its officer force.

Of even greater concern is the way in which we select officers for attendance to developmental schools. In the Air Force Officer Force Development Briefing, slide 4, it

states that force development “...is the series of experiences and challenges, combined with education and training opportunities that produce Air Force leadership.” [25] As it’s stated in the previous quote, it seems that developmental education is a key component of force development. However, AFPC is adamant to clarify that developmental education and command opportunities are not a part of the force development process at this time. On the contrary, I believe that both developmental education and command positions are integral in developing officers for increased responsibilities and nurturing unrealized talent. As with education, I also believe training is essential in developing officers to be successful in their current jobs as well as their next positions. In AFDD 1-1, it discusses the need to build skill-set expertise through a formal training program with set objectives—in order to maximize abilities and skills. [26] The missing ingredient is that the Air Force does not track training courses in a manner where DT members or senior officers can review a summary of training with acquired skill sets. This is a deficiency that plagues our force development process as the Air Force cannot account for training impact or return on training investment. Moreover, without the ability to track training, the Air Force cannot get an accounting of skills acquired through training, or for that matter—the skills acquired from work experiences.

The concept of force development is a formative concept based upon the premise that the Air Force grows its military members. In order to grow its members, it must know the genetics of the member, understand the members’ aptitudes and potential, and career paths. To have this knowledge of each individual, there needs to be a system that captures the attributes in order for the DT to make educated decisions about their

respective careers. The system would track competencies, skills, education and training courses of all military members to baseline their current genetics in order to plot future developmental or growth paths. In today's Air Force, the T-ODP is suppose to serve this purpose. However, the current system does not store such data—and the alternative is for DT members to scour members' official records in order to surmise their skills and abilities. If in fact, we had a system that profiled officers' skills, abilities, knowledge, training and education, it would allow DT members to efficiently review officers' genetics and make more sound decisions on vectors and career development. This would support the Air Force's new vision that it succinctly addresses in its flight plan, "By accessing, developing, and sustaining the right people and having them at the right place ready to perform at the right time, airmen create the world's greatest air and space power." [27] In spite of this glaring weakness, the Air Force is launching its new Officer Development Plan (ODP) with an associated Force Development Toolkit (FDTK) that still falls short of tracking members' genetics. Figure 1 shows a prototype screen shot

from the projected FDTK, in which this dashboard or any other page does not address officer's competencies or skills acquired through experience. On the other hand, the Air Force needs to take a lesson from our Navy brethren and adopt a

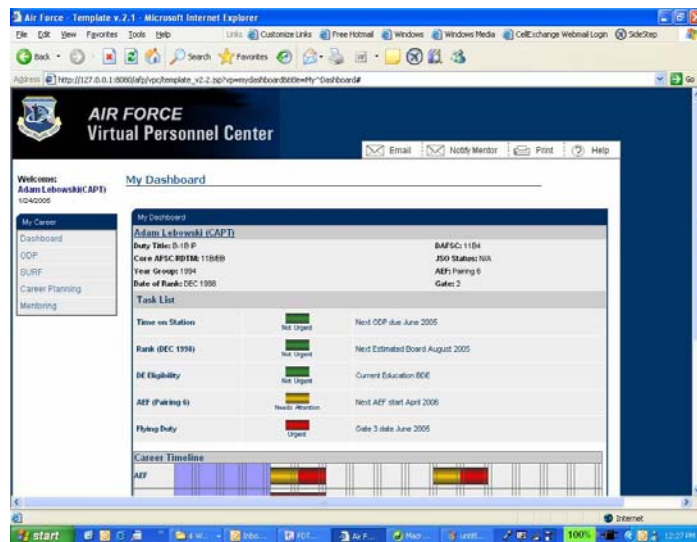


Figure 1. Prototype FDTK Screen Shot [28]

system like their new Sea Warrior methodology and system that profiles each members' genetics and stores it using information technology—so leadership and assignment teams can use the competencies and skills information to make educated decisions on career paths and mission requirements. Figure 2 shows a screen shot of the Sea Warrior System.

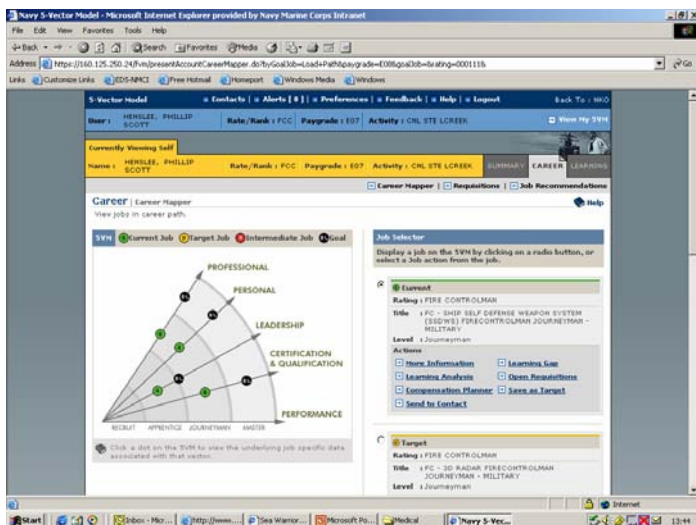


Figure 2. Navy Sea Warrior Screen Shot [29]

In the previous paragraph, I mentioned the notion that assignment teams would use competencies and skills information to make educated decisions about members' careers. It's paramount that the Air Force re-examine the mission of

assignment teams as tactical level duties, assigning officers to positions based upon the DTs recommendation, and only their recommendation. Currently, assignment teams wield enormous power over members' careers, most notably placing officers in positions. In my opinion and many others, the assignment team members do not possess the experience, skills and knowledge to make career-path decisions on officers—affecting their lives, well-being and livelihood. I believe this is best left to the senior officers or DTs who possess the experience to make career decisions—based upon the premise that they have full knowledge of the members' genetics. These same arguments are depicted in the Force Development 101 Briefing, where it's noted that assignment vectors provide

target level and skill sets required by officers to be successful in a certain career path.

[30] This substantiates that senior officers should make these decisions and not Captains and Majors on assignment teams.

A perfect example of a force development initiative of how to capture members' skills and chart out career paths, is what the space cadre is doing based off the 2001 Space Commission recommendations. In a September 2005 GAO report, *Defense Space Activities*, the GAO highlights that the various services are surveying their space members, documenting their education, training, experiences and skills in order to profile each member. Specifically, the Air Force established a database that contains profiles of each of its space professionals with their respective education and expertise. [31] This information complements the already existing T-ODP and personnel system, providing senior space officers more complete information to better chart out the individuals' career field competencies, members skills and career paths. If the Air Force Space leadership can accomplish this monumental task, then much smaller, less diverse career fields can certainly direct resources to survey their personnel—making this approach institutional within the Air Force. I would even take it a step further and have AF/A1 or AFPC issue a Human Resource Capital Strategy that directs all career fields to establish goals and objectives for developing and sustaining their career field personnel—based upon human resource management principles as DoD is doing with space professionals. [32]

Conclusion

Human Capital Management, Human Resource Management, and Force Development are different terms describing the same concept—the ability to manage a company's, or

in this case, a military service's most important asset, its people. For the Air Force, we have a great concept on paper in the form of AFDD 1-1, *Leadership and Force Development*, which provides leadership with the recipe for Human Resource Management. However, if senior leadership compared what is written in the doctrine with how we're executing force development, they would find an inconsistency between strategy and execution. In an Air Force Communications Agency (AFCA) Intercom article, July 2004 issue, Mr Rob Thomas, former Assistant Deputy Air Force Chief of Staff for Warfighting Integration stated, "The Air Force roadmap, 2003 Air Force Transformation Flight Plan, spells out future direction toward capabilities based changes in operational concepts, organizational structures and Technologies." [33] Immediately following this statement, he cited two key components: the new force development construct for how it deliberately develops Air Force members, and the support required by senior Air Force leaders in evolving this construct to transform human capital management. Finally, he tied it all together by mentioning that transformation begins and ends with people—because people enable transformation which allows the Air Force to maximize capabilities in accomplishing the mission. [34]

The Air Force has brilliantly marketed force development as an extraordinary human resource program—and it does possess strengths. Most notably, the Air Force has a written doctrine outlining the program and its intent. Even though it's labored with applying information technology, AFPC has made strides in implementing a T-ODP on its personnel system to aid transition to a future system. Furthermore, AFPC fielded a DT handbook explaining developmental responsibilities of senior leadership in reviewing

individual vectors and growth opportunities. On the other hand, leadership must review the force development strategy and ask the question, is AFPC the right organization to execute force development? Do they have the experienced personnel to make career decisions for the force? Are they adequately trained in human resource management? And do they comprehend the magnitude of their responsibility in growing personnel? These are questions senior leaders must ponder and reflect upon as they scrutinize the current force development strategy.

I recommend senior leadership start by reviewing force development weaknesses. The first line of business should be to re-examine what the current and emerging ODP on AFPC's personnel system accomplishes in developing officers. It tells leaders, supervisors, mentors and members nothing about the members' skills, competencies, knowledge, or training. Before pressing any further and putting precious dollars into the system, I recommend reviewing industry systems developed by companies such as Peoplesoft, Skillsnet and Skillview Technologies, not to mention that General Electric and Microsoft also have internal human capital management systems that are quite impressive and worth review. Not to diminish the information technology importance, but leadership must examine other facets of force development to include analyzing tactical, operational and strategic responsibilities of both AFPC and specific career field managers (CFMs). I'll delve deeper into this subject in section 3 when I discuss the conclusions of the 2005 RAND report on force development and its inferences that AFPC is too busy managing at the tactical level that operational and strategic-level human resource tasks are not addressed in force development execution. Other weaknesses that

must be addressed are the impacts of developmental tours, developmental education methodology, and how the Air Force as an institution forecasts military end-strength and accession numbers. The answers to all these weaknesses can be found in multinational companies who successfully deal with these problems on a daily basis. The answers can be applied by instituting an Air Force Strategic Human Resource Management Strategy along with key measurements to gauge success.

This all sounds great and good—but how to make it happen with shrinking military numbers and expanding mission areas staring us in the face. It’s a vicious cycle of needing people to accomplish the mission, and meeting the mission to justify the people (manpower). At some point, leadership needs to stop the madness and put the resources towards developing a hard-hitting human resource strategy. A GAO report, dated December 2003 on workforce planning, has accomplished the planning for us—as it outlines the principles required to do strategic workforce planning. In this “recipe”, the

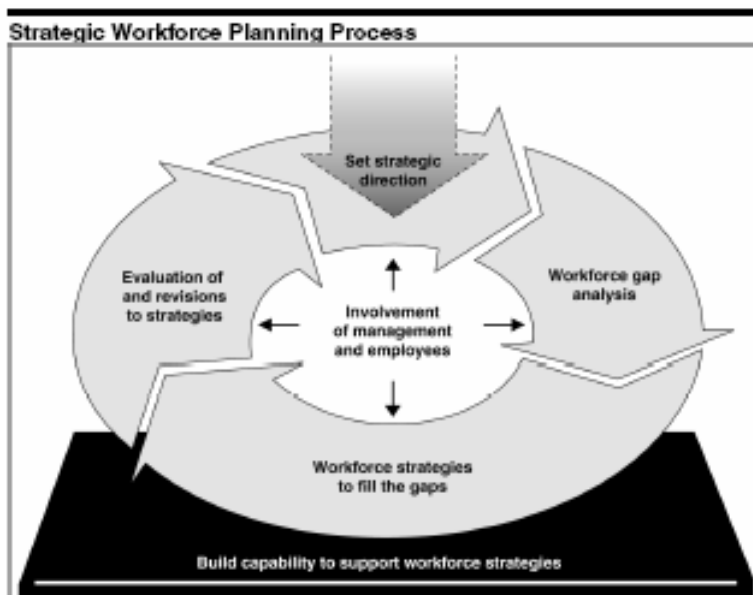


Figure 3. GAO’s Strategic Workforce Planning Process [35]

GAO outlines five principles necessary for planning irrespective of the organization. Figure 3 depicts the GAO’s recommended strategic workforce planning process for organizations that directly relates to the five

planning principles. In short, the principles are strategy development at all levels, determine competencies based on the strategy, develop analysis procedures to identify gaps in performance, build the developmental structure to support institutional learning, and results measurement. [36] Although this depicts a laundry list at this point in the paper, I will introduce you to the concepts in sections 3 and 6 of this paper.

III. Air Force Communications Officer Force Development

The Air Force Force Development Program permeates all levels of the Air Force structure as the cornerstone of institutional development. The communications community looks to the Air Force for guidance and direction in fulfilling its responsibility in growing communicators. If there are strong Air Force developmental traits, the communications community adopts those strengths in order to grow its officers. On the other hand, if force development weaknesses are prevalent, the communications community can act to foster developmental actions within its community in order to serve the best interests of the Air Force. AFDD 1-1 states, “Force development takes individual capabilities and, through education, training, and experience, produces skilled, knowledgeable, and competent Airmen who can apply the best tools, techniques, and procedures to produce a required operational capability.” [37] If the Air Force does not provide force development structure, process and execution, then it’s the communications career field leadership that must mandate we act to develop our officers in a structured manner in developing crucial competencies through training, education and experience—to meet expanding mission requirements. Force development is especially paramount considering the estimated 2,300 personnel cuts the communications officer career field is slated for between 2007 and 2011.

Not only is force development important because we’re going to need competent officers to carry the load after the cuts, but combine that with the fact that we’ll have more mission areas with increased emphasis on technological advances. In a QDR news briefing immediately after its release, Vice Admiral Evan Chanik, the Director, Force

Structure, Resources and Assessment, Joint Staff, was asked how the military will be able to accomplish both the current operational missions along with increased emphasis on emerging missions. Admiral Chanik responded that military members understand change and that each member will need to change and acquire the skills to produce the desired capabilities to meet future challenges. [38] This same acknowledgement should be the communications officer career field's driving force in developing a human resource strategy directed towards developing well-rounded officers adept in meeting challenging and evolving mission requirements. The most critical step in developing a communications human resource strategy is for leadership to concede we need a strategy and to allocate military resources to planning and executing the strategy. In an article on human resource planning, Richard Vosburgh of Hewlett Packard, pointed out that leadership is the catalyst that drives change through setting a clear vision, one that infuses people with energy to work their hearts out towards the future. [39] Throughout the communications officer career field, we do not have a clear vision or expectation of how officers develop, a strategy or overall plan to direct development, or institutional leadership to mandate and guide developmental actions. And currently, the career field is divesting itself of the facilitation process by letting a contractor lead strategy efforts, to include how to develop communication officers. In this section, I will step through various issues and deficiencies, highlight weaknesses, and stress the importance of force development and the military's responsibility to face these challenges head on—in developing processes and solutions.

Career Field Intent

What the communications career field requires is exactly what the Army Field Manual 22-100, *Army Leadership*, stresses in Chapter 7 on Strategic Leadership, “Strategic leaders look at the environment outside the Army today to understand the context for the institution’s future role. They also use their knowledge of the current force to anchor their vision of reality.” [40] Basically, what the communications officer career field needs is a strategy that links current and future mission areas, the capabilities needed to accomplish the mission and competent officers to enable the capabilities. Lt Col Burkhart, the Communications Officer CFM, put it bluntly, when he stated in an e-mail on 3 January 2006, “...what we have today is inconsistent and ineffective” as he summed up how we develop our communications officers to meet operational missions. He further went on to state, “We are certainly not providing a common operational foundation.” [41] However, this is not a consistent view with what the AFPC Assignment Team briefs in their Communications-Information Officer Assignments Briefing, specifically slide 4, which states, “What this means for you: Deliberate Development ... Strategic Career Planning.” It further expounds on key bullets targeting assignments, improved educational opportunities, more realistic expectations and enhanced feedback. [42] From all indications, research and trends, I tend to side with Lt Col Burkhart that today’s process is inconsistent and ineffective—as the communications officer career field is not deliberately growing its officers contrary to what slide 4 of the previous briefing indicates. If officers are being groomed and developed, they are doing

it independent of the institution through mentorship or actively executing their own development plan.

I find it increasingly interesting in my research to find many leaders state in briefings and articles how critical people are to mission accomplishment. The former Deputy Chief of Staff for Warfighting Integration, Lieutenant General Kenne in a April 2003 *Intercom* article, stated, “While technology, organization and strategy contribute to combat effectiveness, our most essential ingredient to success remains the professionally trained airman. This is why we choose to invest so much in training and development.” [43] Yet 3 years later, the communications career field is grappling with creating a developmental strategy for its officer career field. Yet, in my readings, I found a terrific summary of this enigma in the book, *The Workforce Scorecard*:

We find it curious that for the last several years there has been a lot of discussion about the strategic value of human capital and the workforce being the most important asset in many businesses. But in many cases that discussion seems to proceed as if this particular intangible asset is immune to the same influences that create value in other assets. [44]

What’s so clear is that the communications career field needs a clear human resource strategy, not one that is used as a highpoint in a briefing or article, but one that is articulated in the words and grounded in leadership actions—provided the assets and resources are assigned on a priority basis. Only after asset allocation and priority meet, will the career field’s human resource strategy be effective in growing officers to meet future career field challenges.

Leadership must leverage its human resources strategy against its organizations overall strategy—on which direction the organization is heading, what it holds important,

how it will accomplish the strategy and who are its customers. According to the Communications and Information Workforce Transformation project briefing, dated 9 August 2005, Gartner Group lays out the deficiencies in the workforce strategy by stating that the “Air Force lacks clear, synchronized and actionable direction on broad enterprise initiatives.” [45] This statement lends credence to the fact that strategy is the centerpiece of our career field and without it, we’re directionless—and can’t build plans, human resource actions, or allocate resources accordingly. Furthermore, Gartner continues by declaring the lack of a total force strategy and the subsequent realization that without a strategy, the Air Force and communications career field will not be prepared to meet evolving objectives. [46] Career field leadership acknowledges these facts and has hired Gartner Group to lead and facilitate the development of a strategy—though one must continue to scrutinize the sense of purpose, priority and resource allocation—as this effort began in early 2005 and still requires focused momentum.

Consistent with AFDD 1-1, “Developing Airman best happens through a deliberate process, one that aims to produce the right capabilities to meet the Air Force’s operational needs.” [47] The communications career field does not have a deliberate process to develop its officers and, more specifically does not have governance, direction, or ample resources to successfully undertake the task to implement a development strategy. In the GAO report, *A Model of Strategic Human Capital Management*, dated March 2002, the GAO outlined eight critical success factors for managing human capital strategically. The basis for the report was to provide government agencies a blueprint to build fundamental human resource management strategies that foster effective mission

accomplishment. [48] This pre-force development era report, gave the Air Force and our communications career field the recipe for success, one that coincides with what senior leadership state in sight pictures, briefings, transformation flight plans and more importantly, Air Force Officer Force Development Briefings. Of course, the focus of this report is the communications officer career field—with the sincere hopes that both the career field and the Air Force will both gain valuable insight into developing and managing a human resource management program. What we want to do is prevent what’s written in the book, *Reframing Organizations*, “Many, if not most, organizations either lack an explicit human resource philosophy or ignore the one they claim to have.” [49]

In the communications career field, we do not manage our human resources with the same emphasis and precision as we do finances, information technology and weapon systems. In an article by Tom Davenport of Australia’s Chief Information Officer (CIO) magazine, he draws attention to this fact, “While we know a great deal about our companies’ financial and physical assets, we know very little about their human assets.” [50] What he’s getting at here, and is so evident in the Air Force, is that we spend enormous efforts on processes and automation to track every aspect of finances and equipment, but pay very little attention on tracking or analyzing our human resources. For instance, leadership consistently reference how important force development of human resources is to our ability to meet diverse missions as stated in AFDD 1-1, “Through deliberate career planning and development, Airmen are assigned and employed to meet mission requirements...” [51] But, as an institution, we don’t take

careful measures and steps to do what we say—especially within the communications officer career field. The need for deliberate career planning and force development was a main theme of the 2006 *QDR* as it outlined many imperatives that require we re-examine the strategy for developing the DoD’s total force—and I would more insistently state the Air Force’s officer corps. [52]

In the book, *The Future of Human Resource Management*, the authors of chapter 23 talk about workforce strategy. In walking the reader through fundamental concepts, the authors state, “Only when a workforce strategy is known and understood can the HR strategy be effectively articulated.” [53] This is key as workforce and Human Resource (HR) strategy are not one in the same—as a workforce strategy must be developed on what you require from your employees before you develop the HR method to get them to the desired performance. What I’ll show in the upcoming pages is that the communications officer career field neither knows nor understands what workforce we require and thus can’t have a viable HR strategy. In undertaking this laborious task, I’ll discuss issues within career field management, DT process, assignment team process, education, training, and will close with a smattering of other tangible issues to include development, tracking and measurements.

Communications Officer Career Field Management

Career field management is the act of senior leadership corralling and focusing all developmental efforts of growing officers to the level where they, individually and collectively, accomplish current and future Air Force missions. From studying strategy in *The Future of Human Resource Management*, I would have to conclude that a

workforce strategy and career field management are one in the same. The book states, “A workforce strategy is developed by identifying the strategy of the business and the firm culture necessary to effectively execute the strategy.” It further expands on the definition, “Workforce strategy also includes an organization’s philosophy regarding strategic capabilities, the strategic positions, and strategic players.” [54] I would dare to say that within the communications officer career field, we do not accomplish workforce or career field strategy—and thus don’t link our officer corps or workforce to strategic capabilities. I don’t believe on whole, we place an institutional emphasis on workforce developmental and link all efforts and expenses to the overarching Air Force strategy. In the article, Transforming HR Globally, the author writes that, “A nonthreatening way to accomplish this task [linking workforce to strategy] is to participate with business divisions in developing their annual business strategy, and then craft an HR strategy to help each division meet its business goals.” [55] Even though I see the many briefings on the Community of Practices, I rarely see in any of these briefings, the clear linkage between vision and strategy, and what the communications officer career field is doing to grow its officers to enable the future. It all starts and ends with the career field structure to develop officers.

The entire emphasis of having a career field strategy is to develop officers. A career field structure enables leadership at all levels to identify, grow and measure developmental efforts as part of a strategy. Figure 4 on the next page represents the current communications officer career field management structure as displayed on slide 5 of the AFPC Communications–Information Officer Assignment Briefing. The figure

depicts a well-coordinated management structure that is to development, govern, manage, and execute a career field management plan. Upon my studies into the career field and its management, I've drafted a

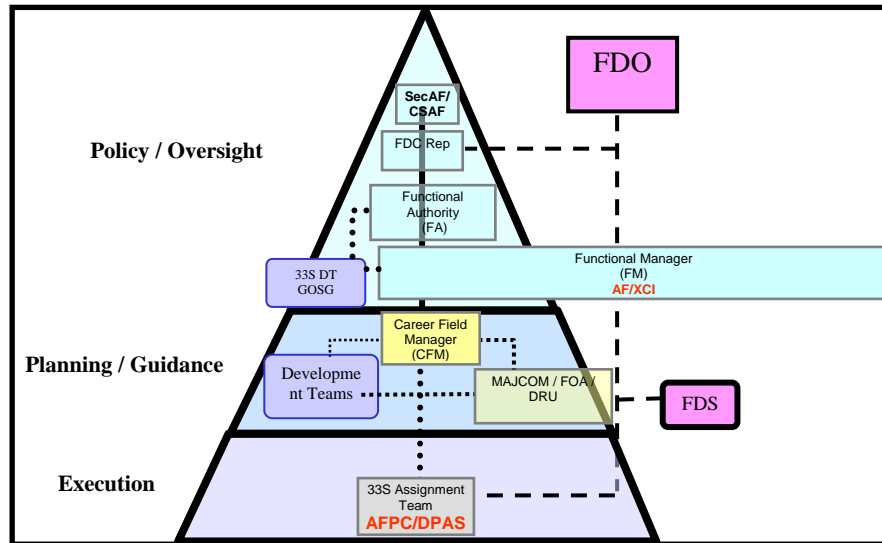


Figure 4. Current Communications Officer Career Field Structure [56]

more rational management structure, one based off the processes I've uncovered by discussing the subject with the experts. This structure is depicted in figure 5. The area

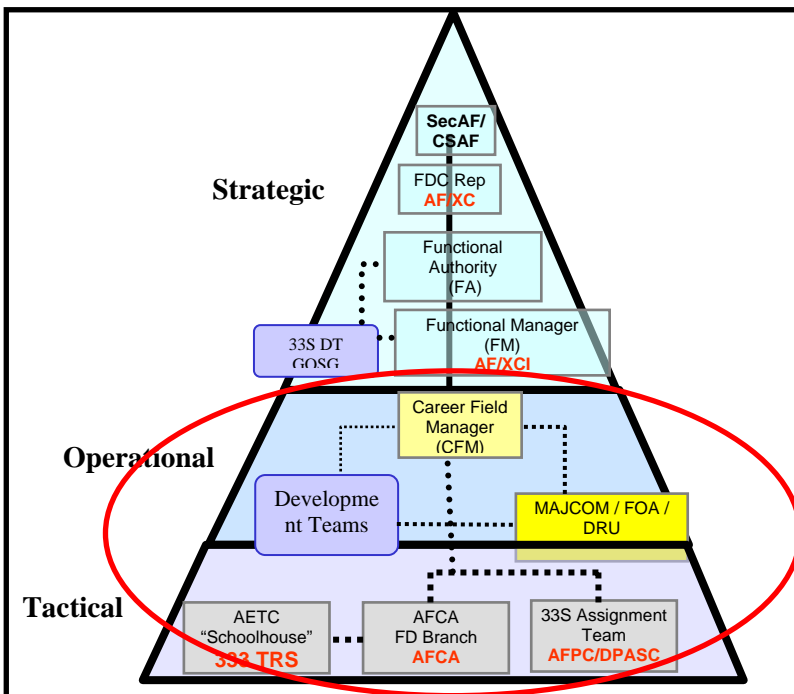


Figure 5. New Communications Officer Career Field Structure

encircled in red, the operational and tactical-level force development functions are the focus areas within this paper. I will leave it to the reader to compare the two figures and make your own conclusions; however I want to discuss

several high-level issues that I will address in more detail later in this section. In examining figure 4, the first issue is that it looks like the CFM is the driving force behind officer career field functions. Currently, this is not the case as I've come to realize that most communications officers don't realize we have a CFM. Furthermore, there's not a real coordinated effort between the CFM and tactical level functions as depicted in figure 4. Finally, as noted on page 33, top paragraph, is AFPC the execution or tactical executor of force development? This would mean that assignment processing is the only tactical-level task within force development. What about career field focus, training, and management? In the book, *Talent Force*, it emphasizes a core management function by stating, "...your company needs to have a strategic integration point person for its talent objectives—a Chief Talent Officer—to ensure that the talent organization is empowered with the responsibility, knowledge, and tools to add strategic value to the business and achieve bottom-line results." [57] If the communications career field had a strategic integration point person, there would be one central coordinating body for all developmental actions with highly coordinated, yet decentralized execution. Figure 5 on the last page depicts this very essence of a centralized career field function with decentralized execution. Secondly, there's no single coordinating agency for career field training—ensuring all training is based on valid requirements and that all training is tracked for measurements. This would allow mid-level and senior leadership to link training initiatives to mission capabilities and postulate a return on investment for money and time expended. Lastly, there's no relevant connection between the CFM, AFPC assignment team and agency functional area managers (FAMs) on the subject of career

growth and progression. If there were, then the CFM would wield appropriate accountability and authority over how officers are developed, and how they are assigned to educational opportunities and positions. As you compare figure 5 with figure 4, in adopting this concept of a centralized, concentrated function, there would be synergy between the CFM and tactical-level actions—to include interaction with the DT and FAMs. Additionally, there would be less critical disconnects—that will be addressed along with these three issues in the upcoming pages.

The basic principle of officer force development is to grow officers to progress in their careers at increased level of responsibility in accomplishing the mission. To do this in a deliberate manner would take a career field management plan along with operational and tactical actions to manage the plan. In the December 2003 GAO report on Human Capital, the report stated “It is an essential element of the institutional infrastructure that each agency needs to ensure that its human capital program capitalizes on its workforce’s strengths and addresses related challenges in a manner that is clearly linked to achieving the agency’s mission and goals.” [58] Since the communications officer career field does not have a management plan, the development of its officers is left to individual efforts—dependent on a few good mentors, luck, and individual initiatives without institutional oversight. Then, if officer development is left to ad hoc practices, how can our career field measure return on investment, career field health, or even that we have competent officers to meet future mission requirements. The bottom line is that leadership cannot measure or gauge the career field health without a management plan and associated analysis or measurements. The 2005 RAND report on the under strength of officer career

fields links the lack of a management plan to the fact that most CFMs do not have the resources to adequately manage their career fields. Furthermore, they pass the management responsibilities to the assignment teams who tend to focus on the tactical activities of assigning officers to position instead of focusing time and effort on broader career field issues like long-term strategy and development issues. [59] In this same report, RAND cited the communications officer career field as falling into this same trend.

Another viable part of officer development and a huge contributor to growth is training. Some leaders say that education prepares the officer for future potential whereas training prepares the officer to do their current job. Nonetheless, training is critical to both current and future development in order to prepare officers for increased responsibilities and challenges. The book, *The Workforce Scorecard*, summed up how training and deliberate growth opportunities are critical to officer development.

Designing and implementing effective training and development systems is a particular challenge because all the costs are borne in the present, while all the benefits accrue in the future. Firms that allow undifferentiated strategies are unwilling to absorb those costs or fail to recognize the benefits. They tend to let employees manage their own careers, give everyone equal access to the developmental budget, and largely provide ad hoc developmental assignments. [60]

The authors of this book understand the importance of a training strategy that links to and supports the overall human resource strategy of a firm. Through my close examination of the training processes, the career field has exceptional personnel managing portions of training; however, unlike the training themes mentioned within this book, the communications officer career field does not possess an overall training strategy. And,

except for several courses taught at the communications school house at Keesler Air Force Base, most training is not based on career field requirements, finite officer developmental numbers, nor is it linked to fulfilling developmental strategy.

At this time, the communications officer career field training foundation is based upon the occupational survey, utilization and training workshops (U&TWs), and the career field education and training plan (CFETP). These three items are either accomplished and/or developed to provide guidance to communications officers in their developmental endeavors. The occupational survey is the survey of all communications officer tasks, accomplished by Mr. Jose Caussade, Air Force Occupational Measurement Squadron (AFOMS). In devising the task listing, Mr. Caussade interviewed 84 out of 4,000-plus communications officers Air Force wide at nine sites, and came up with 1,093 communications tasks. Although a diligent effort, I discussed several concerns with Mr. Caussade that bear mentioning in this report concerning the task listing. Most importantly, he identified 22 specialties or areas of interest where communications officers perform functions. At least 7 of the 22 could be considered base-level functions. Another 4 of the remaining 15 could be considered sub-areas of the remaining 11 functions. And when I started to review the tasks in the first section of Information Systems, from my 5-plus years of base-level and Major Command (MAJCOM) inspector experience only 25 of the 83 tasks could be considered officer-level tasks—with the remaining being enlisted tasks. When I asked Mr. Caussade about the disparity, he replied “...I discovered that while most officers are managing those functions, some are actually performing those tasks.” [61] If we’re to get a good accounting of what officers

do on a daily basis to justify growth and training opportunities, I would focus attention on what officers do skills-wise and not what their subordinates do task-wise on a daily basis. This is too important because we base the CFETP as well as training requirements upon the results of the survey. We need to get it right—and I'd even go as far as to say we should not only base both the training plan and requirements upon the survey, but upon a base-lining of all 4,000-plus communications officer positions. This would yield a much more accurate accounting of communications jobs and is being done in other career fields such as Space and Acquisition.

As for the two other foundational training areas, I believe the U&TWs, and CFETP, if properly executed are fundamental in developing communications officers. However, I would caution that we place great emphasis on who attends the workshop and who scours the training plan for accurate and relevant tasks. From what I gather in e-mail interaction with AFCA and the CFM, they, the school house representatives and the MAJCOM/agencies FAMs attend the U&TWs, and discuss career field training initiatives. In my time at Air Force Space Command, I regularly had debates with the former Force Management Branch Chief on the feasibility of having a mid-level Captain as a MAJCOM FAM when the enlisted forces always assign the top ranks to accomplish the same functions. I always thought that if FAM's duties were fulfilled properly, that it would take an officer of the Lieutenant Colonel rank to properly manage their respective career fields under their purview. This would mean that we'd have experienced officers setting strategy within their respective commands as well as mentoring, guiding and advocating career progression for their respective communications officers. You can also

assume that I think that the same senior-level perspective is needed at the U&TWs and in developing the CFETP. However, it is evident that great strides have been accomplished by the CFM to provide said experience over the CFETP as the current draft is a far more comprehensive document than the original document released in December 2003. In reviewing the original document, I was left to realize that many tasks were transferred from the many enlisted communications CFETPs. With the draft plan, I see that deliberate thought was placed on differentiating officer tasks from enlisted tasks and careful consideration was put into how the career field would appropriately gauge competency level. In section 6, I will recommend that its crucial to do three things in reference to the CFETP: 1) base competency areas on skills and not tasks as officers acquire skills to manage versus being task oriented; 2) base the training plan on a baselining of the 4,000-plus positions and use the occupational survey as another tool to validate the positions; and 3) build a certification process based on competency areas and underlying skills. This builds a foundation for developing officers and measuring not only their progression but overall career field health—and senior leaders would be able to chart future mission capabilities off solid career field indicators.

An integral part of career field management that ties to development, oversight, training and a host of other attributes is career field governance. Governance consists of authority to make decisions, guidance to enact strategy and responsibility to oversee and report on career field progress. However, overall success of any career field strategy is support, in writing as well as action, from senior leadership. Senior leadership must be on the front lines promoting, directing, and mandating career field development and

execution—and to coin a phrase by a former senior communicator, Lieutenant General Woodward, must be a benevolent dictator. In the communications career field, I don't see developmental governance as a mandate, or directive in nature, but disjointed and ad hoc. However, there's another career field, Space that is becoming a model for other career fields in the efforts to develop their Space cadre development and management program. Even though Air Force Space leadership gets bombarded frequently by the GAO for not progressing according to mandates, the Space career field has made tremendous strides in capturing their officers' competencies, cataloging training initiatives and aligning positions according to competencies. These initiatives and program progression is due to career field oversight and governance—that directs execution and mandates results. [62] Within the communications officer career field, there is no governance in the sense of accountability or direction which is crucial for human resource management.

Up to now in this section, I've wrote about career field structure, process, training, management and governance, but one key attribute is missing—and that is of officer development tracking. On the Hyperion web page, under Human Capital Measurement and Reporting, it points out that a structured framework to capture and store data on workforce development is paramount so leadership can analyze performance and forecast future requirements. It further reports that disjointed collection methods on spreadsheets and other tools do not allow for information integrity and useful analysis. [63] The same is true within the communications officer career field as there is not a system or structured model that collects, retains, or stores communications officers' developmental

information. Yes, the Air Force has the Assignment Management System (AMS) and the T-ODP, however modernized, it does not capture developmental data, competencies or skills required to plan career field strategy. This is not uncommon in both the military, DoD, or within industry as fielding information technology or structured human resource models are in its infancy. And, when information technology is usually applied, it only tracks employees and not their skills, competencies or training—as is the case with AMS or the T-ODP. On the Intralearn web site, the software company specifically points to the need to capture employee abilities and competencies in order to possess business advantage. They further state, “...people are important, but their competencies are the real substance of success.” [64] If employees’ competencies are what creates business advantage, then for the communications career field to create competitive advantage over its adversaries, leadership must direct implementation of a model and subsequent system to capture officer competencies. Only after officers’ information is captured will senior leadership, especially those who sit on DTs, be able to accurately and sufficiently make decisions on officers and their developmental paths.

Communications Officer Development Team

The AFPC *DT Member Handbook* explicitly states the responsibilities of the development team:

Development Team meetings are the corporate process in which officers’ developmental objectives and their commanders’ developmental recommendations and assessments are reviewed. Armed with these key inputs, and with insight into opportunities and constraints for each career field, DTs will provide two new outputs: feedback to the airman and his or her commander on possible developmental directions, and a vector that AFPC’s Assignment Teams will take into consideration as they fill Air Force

mission requirements. [65]

In reviewing the handbook and comparing it to the feedback I received from the AFPC Communications Assignment Team, our career field is not providing feedback to the officer—affording the commander and officer valuable insight into the officer’s development path. This is contrary to figure 6, the developmental review process found on slide 14 of AFPC’s Communications-Information Assignment Briefing.

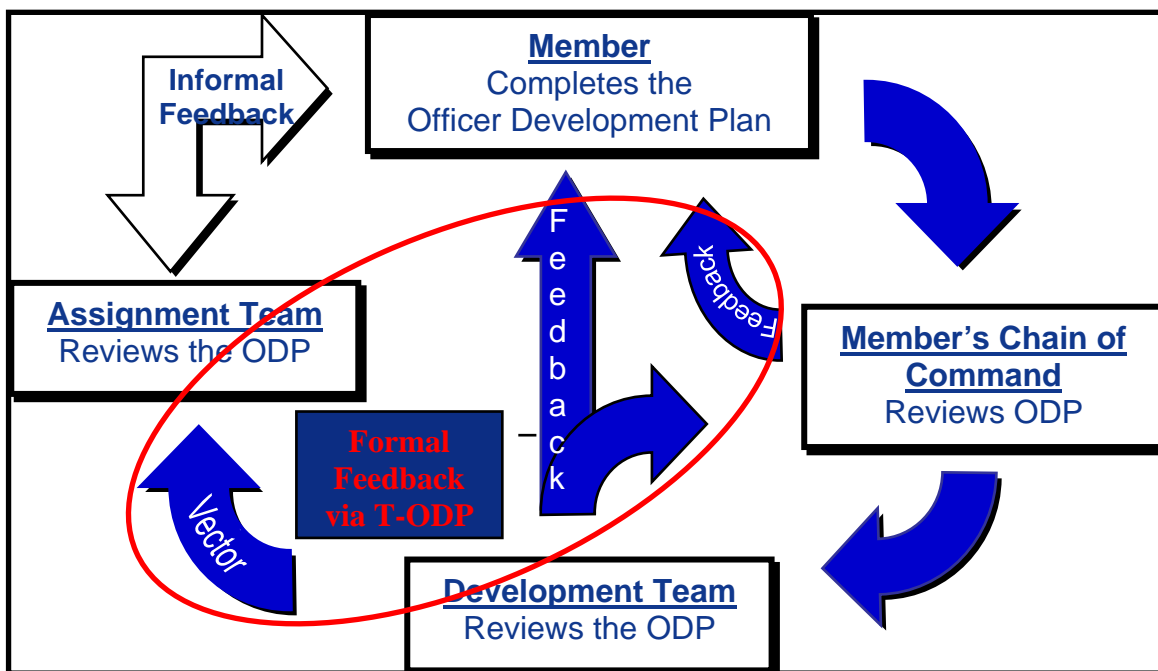


Figure 6. Developmental Review Process [66]

Even more disturbing is that the communications assignment team inserts a “cookie-cutter” statement in the section of the T-ODP where the development team feedback is slated to be documented. AFPC provided the most alarming remarks when I asked the assignment team why communications officers do not receive feedback, I received two answers: 1) the DT reviews in excess of 600 officers during each session and they do not have the time to provide feedback, and 2) if the commander is a senior officer, the

assignment team will provide feedback upon request. Both answers are not congruent with force development guidance, most notably AFDD 1-1, where it elaborates on airmen playing key roles in operations, the Air Force investing time and resources to develop their skills, and that the Air Force must maximize the competencies possessed by airmen. [67] The communications officer DT in tandem with the assignment team, does not accomplish the basic foundational concepts required in AFDD 1-1. In recognizing this deviation from doctrine, communications leaders should re-examine this process and take note of what's written in the book,, *Ruthless Execution*, "Business leaders increasingly assert that their most important task is to make sure the right talent is in place; some even say the rest of the business takes care of itself." [68]

Let's assume the underlying thrust of the DT is to ensure the right talent is in the right place at the right time by setting officer career paths and development options, as matched against career field strategy. Then, the communications DT would review all officer records, rank officers, analyze career field health, scrutinize communications positions and then assign officers to career development paths based on requirements. In the 2005 RAND report on force development, RAND states, "...we have doubts as to how much sustained attention they [development teams] can give to detailed diagnosis and analysis of career-field health." [69] RAND further goes on to explain that the anomaly of force DTs and assignment teams working only on tactical-level tasks does not allow the DT or career field management to focus on operational-level management such as assessing the career field health, scouring officer records to identify competencies or identifying skills gaps within the career field. These critical tasks are not being

accomplished, as the DT adjourns after a week-long session only having assigned vectors—vectors that may or may not be used by the assignment team when sourcing jobs.

From writing about DTs, it would seem that the vector is the DT's product. So, what is a vector? It tells me nothing about the officers' competencies, skills, knowledge. It tells me nothing about their educational and training background. And, it tells me nothing about future growth potential, a 5-year plan, career field opportunities or senior leader expectations. In fact, all it tells me is that the officer is going to Air Staff, NAF/SPO/Center, Joint Unified among other agency types. It tells me nothing about a career plan, objectives, or career field strategy. From candid conversations with other communications officers on the subject of DTs and vectors, it reminds me of a quote I read in Jack Welch's book, *Winning*, "A small and frankly terrifying group of HR executives held secretive opinions about every manager, and they could tar you for life if they wanted. On the other hand, they could also move you up very quickly." [70] Of course, this is an extreme theory that abounded at General Electric; however some communications officers look at the DT process and vectors in the same context—as not serving a purpose to develop officers evenly based on potential and performance. To remedy this negative outlook, the career field needs to provide honest and relevant feedback, an open and transparent development process, and a fair and equitable assignment system—so that all offices can have clear expectations about their careers and developmental potential. The author of *Human Resource Champions* discusses the previous human resource attributes as critical business issues that engage both the

organization and employee in a professional and harmonious relationship—one that the employee feels appreciated and valued by the organization. [71] Even though communications officers serve the military, and obey orders, they too are human and need intrinsic and extrinsic motivation through feedback, guidance, development in the hopes that the organization has their best interest at heart. With the downsizing and increased emphasis on technology, the career field cannot continue to treat the communications officers as a checker, dutifully moving them tactically from assignment to assignment—but must consider the officer as an asset, a strategic asset to grow and develop to meet future challenges.

Through the last several paragraphs, you get the sense that the DT process is somewhat political—and I would have to agree from perceptions manifested in conversations with a former communications senior leader and former DT member. In receiving feedback from this particular senior officer based upon the November 2004 development team meeting, he said that four senior officers knew me personally and vouched for my credentials as an officer—allowing my name to be forwarded for a developmental education opportunity. Now, say a good, hardworking officer's T-ODP and SURF go before the DT and not one member has knowledge of the officer. Do they request the officer's record for further analysis and review? Is this standard practice or does time constraints dictate that minimal officer information is reviewed and is it equitable across the board? From e-mail exchanges with AFPC, I don't see a set trend or practice that mandates an equitable playing field for all officers to receive the same scrutiny in vying for assignments, vectors or educational opportunities. [72] Matter-of-

fact, in my travels while assigned to the Air Force Space Command (AFSPC) Inspector General (IG) Team, I was often asked about the DT process and the perceived inequities associated with the political aspects of favoritism for assignments, commands, and educational opportunities. In an attempt to support the current system, I would recommend prompt action on the officer's part to get to know a senior leader who may one day sit on a DT. It's ironic that for this paper, I read the book, *It's All Politics*, where it summed this up perfectly by stating, "You can't read the tea leaves if they won't even invite you to tea. So, the first important step is to become connected to at least one person who seems to know how your company works." [73]

In relation to the DT process, I wish to briefly touch upon three other development responsibilities, dealing with developmental assignments, command selection and developmental education recommendations. Within the Air Force, there's a big push to broaden stove-piped, career-field minded officers into other career fields to allow for increased mission understanding. Before heading to my developmental education at AFIT, I too was vectored for a developmental tour in Space, only to find out 1 week before I departed for AFIT, that the communications career field was not assigning officers to developmental tours. This came as a shock and was later substantiated by an AFPC e-mail that stated, "To my knowledge we only sent one officer [to a developmental tour] and are not going to send any more any time soon." [74] Not to belabor the issue, but as the most diverse and technical career field within the Air Force, I would have expected that communicators would be at the pointy-edge of the spear in broadening its officers—in becoming better in-tune with the Air Force environment. The two other

responsibilities go hand-in-hand, developmental education and command selection. In my research on companies, they consider education and leadership promotions as key and essential parts of employee development—whereas, according to the cookie-cutter guidelines all communications officers get on their T-OPD, education and command are not considered vectored positions and thus not part of the force development process. Now, I agree that all officers should be scored or ranked and then assigned to positions appropriately; however, I believe all officers should get an equitable chance to go to developmental education and command as well as being assigned to high priority positions. In asking AFPC if they keep officer rankings, I was told no—that they do not rank officers or keep officer rank listings. [75] Thus, in section 6, I will demonstrate the integration of all aspects of officer force development under one umbrella process that treats all officers equitably across the board.

Communications Officer Assignment Team

In figure 4 on page 44, the assignment team has execution-level tasks in the communications management structure. In the Force Development 101 briefing on slide 17, the assignment team is charged with breaking the “next assignment mindset” and to establish a “steady-state vision” based upon long term institutional vectors. [76] However, if you read the 2005 RAND report on Air Force Officer Career Fields, it specifically points to an institutional problem as “...most career-field management activities concentrate on decisions for tactical problems. These short-term problems are formidable and leave little time for managing longer-term operational and strategic issues reflecting a career field’s health.” [77] Now, there’s a disconnect between what the

assignment team is doing and the execution to get the career field to thinking long-term career field strategy. The execution piece of the communications career field cannot be considered to deal singularly with assigning positions, and thus, AFPC cannot be considered the execution authority within the communications management structure. The execution authority needs to be the CFM who in turn, delegates one of the career field management responsibilities, assignments to the communications officer assignment team.

As I further reviewed the many subtleties of the communications officer career field management, I tended to rely on industry to demonstrate common human resource management practices. In looking at the current execution piece of the communications career field, I asked the communications officer assignment team about their human resource management experience, training and processes. In response, they stated they attend limited human resource training with most being on-the-job training as you go. Additionally, the team does not have a specific operating instruction or standard operating procedures to guide their actions in assigning officers to positions—which currently is the execution piece of our career field management plan. [78] Now, for a team that is overburdened with 4,000-plus communications officers, it would be prudent to have an operating procedure to dictate how they're going to achieve the steady-state vision and break the next-assignment mindset. In the 10-plus human resource management books I bought for this research, one common theme transcended all the readings—and that was to have a deliberate and comprehensive strategic human resource management plan based upon the premise that employee development was the crux of

successful organizations. For instance, in the *Talent Force*, the author stated, “The reality is that it is not enough to have a person in place. Only the right person with the right skills, attitude, and attributes can realize the potential of any given role at any given point in time.” [79] To do this takes strategy and then assigning the execution piece to an organization equipped and experienced to fulfill the responsibilities with the understanding that the assignment team handles the assignment piece of career field management.

Currently, the AFPC communications officer assignment team is the execution arm of the career field management structure—and as such accomplishes certain tasks that support overall career field management. It all starts with vectors and officer development which, theoretically goes hand-in-hand to get the career field to a steady-state vision and get away from the next-assignment mindset. From several paragraphs ago, it’s understood that vectors are based upon what type organizations you have not been assigned to in the past and not based upon what skills you possess or have acquired in your career. When I asked AFPC to elaborate on why vectors are so vague and do not describe the strategy behind the vector, they wrote, “The vector is not vague, the rationale is that these are jobs you haven’t done yet and can do in the next 5-7 years.” When asked to further clarify on why we can’t give out more detailed information to officers on why they were assigned the vectors, I received two similar answers: 1) “Our senior leaders can’t explain every detail...” and 2) “We uploaded 600+ vectors and do not have the time to personalize each & every one.” [80] In reading the e-mail response, I was not concerned for my career as I’ve been blessed to have a successful and rewarding career,

one in which I deliberately planned my own future in lieu of a institutional strategy.

However, there are talented and hardworking communications officers who deserve more feedback on their careers so they can have a somewhat solid career expectation. This sparks a thought about a passage from the book, *Future of Human Resource*

Management:

HR professionals who care about people will automatically make strategic decisions and recommendations that are based on a full understanding of how it will impact people. The decisions or recommendations will be better as a result. HR professionals who care about people will expend the effort to eliminate or minimize the downside impact on people that may come from tough business strategies and decisions. HR professionals who care about people will provide exceptional HR delivery because they want to ensure that employees are treated fairly and with respect. [81]

This passage gets to the heart, the spirit of force development because if management really cares about its employees or in this case, military officers, then management will provide development opportunities and the structure to grow its force. In return, employees or officers will feel engaged and feel that they have a stake in their career progression.

The centerpiece of the communications officer assignment team is the assignment process. Although from a research standpoint, the foundation for the assignment process, vectoring requires immediate attention, it's important to review the current assignment process. This is the piece that the assignment team does efficiently as noted in many briefings I received from the assignment team. However, the question arises to the effectiveness of the assignment process—more focused on whether assigning officers to positions accomplishes force development goals. RAND's 2005 report on officer career field management contained an eye-opening subsection relating to officer assignments:

On a daily basis, assignment officers do an effective job of executing assignment actions. However, tactical measures of effectiveness, such as position fill rates and time to fill positions, tend to drive assignment processes that emphasize the near term: a goal of filling spaces quickly and drawing only from the current pool of officers up for reassignment. This process does not necessarily result in optimal career paths for the officers or the institution. In fact, there are considerable disconnects and gaps in operational- and strategic-level force management. [82]

This is precisely the case within the communications officer career field and its assignment process as the assignment officers, no doubt, are very good communicators, but putting them in charge of their peers' careers without proper human resource experience—and its all tactical. In an article I read about sustained individual success, it mentioned an original thought that applies to the manner in which we currently assign and grow communications officers. It was stated like this as it pertains to the individual officer:

In checkers, all pieces move in exactly the same way. Average managers treat their people this way. In chess, all pieces have their own unique moves. Great managers treat their people this way and win. They learn how each piece moves then they incorporate that knowledge into their overall plan of attack. [83]

We need to treat all communications officers as individual chess pieces and develop them according to the talents and attributes they bring to the fight. Yes, it takes more resources and people to manage a workforce in this manner; however, the rewards and benefits outweigh the costs.

As stated above, the assignment team is very efficient in assigning officers to positions. Again, the question arises about whether the team is effective both in developing officers and accomplishing the current and future mission. Both the development and mission accomplishment questions are hard to measure and

quantitatively answer—as there are no current metrics for senior leadership to gauge force development success. We’ve already discussed and came to the conclusion that the current force development program and the assignment process does not deliberately grow officers as stated in the myriad articles in the past 3 years. Now, leadership needs to ask itself if we’re meeting mission requirements—not by qualitatively looking at the past for success indicators, but looking at the present and future and asking, in the face of a drawdown, can we function successfully and will we have the talent. The assignment process does not even begin to shed light on strategically assigning officers to grow them in the hopes that we’ll be able to meet future mission success. In *Future of Human Resource Management*, it discusses human resource strategy in the context that management must anticipate the future and then develop a human resource strategy that links all actions, training, assignments, experience, and education to employee development. [84] If done correctly and with great care, business strategy and human resource strategy will be linked and synergistic for the organization. If not, then the organization is merely playing checkers!

The current assignment process places communications officers in positions, based upon level of agencies they have not been assigned to in the past. This is the communications assignment team’s version of force development—one that does not track, deliberately plan, nor consciously develop officer competencies, skills, knowledge base or in some cases, experiences. Today’s assignment methodology is depicted by the current career field pyramid in figure 7 on the next page. Let’s look at it from another lens and say that career field management supports the current assignment process, but

wants to measure effectiveness. To do this, management should ask for all 4,000-plus communications officer positions to be base lined with job descriptions, mandated skill requirements, education and training pre-requisites, and experience level. I asked this very same question to the assignment

team and was told that they receive the position descriptions only when there is a requisition submitted for an opening. [86] However, the position descriptions are not maintained in a central location, inventoried for competency and skill sets, nor used to

identify all mission capabilities throughout

the career field. What should happen is that the position descriptions, with mandated requirements should serve as the foundation for officer development strategy, education and training requirements, and strategic allocation of the communications officer corps. This would eventually allow the career field management to successfully forecast career field moves, prioritize positions and officers, and feed into accession manning forecasts. I'd even venture to guess that the career field management would be more precise on managing the numbers in each commissioning year as per figure 8.

As seen on the chart, we have several issues like the bathtub effect in the 1990 – 1993 year groups and the overages in the 2001 – 2003 year groups.

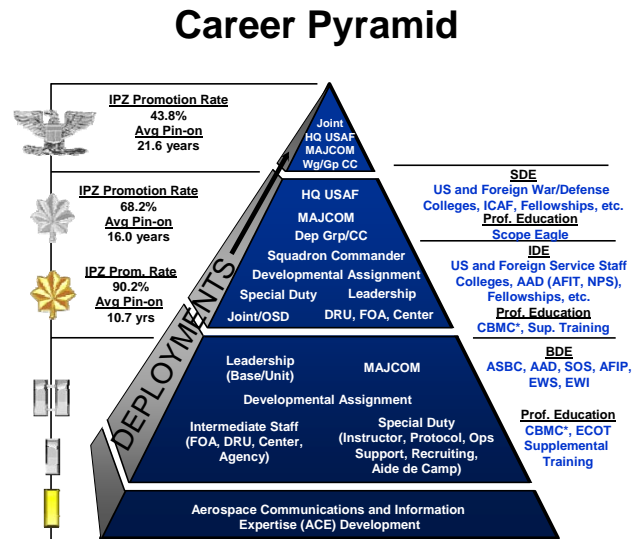


Figure 7. Current Career Field Pyramid [85]

As discussed in the 2005 RAND report on career field management, one-third of the 4,000 communications officers in 2002 were lieutenants. [88] With a good career field management program, we would prevent this from happening in the future.

Three other facets of the assignment process require close scrutiny. I alluded to the

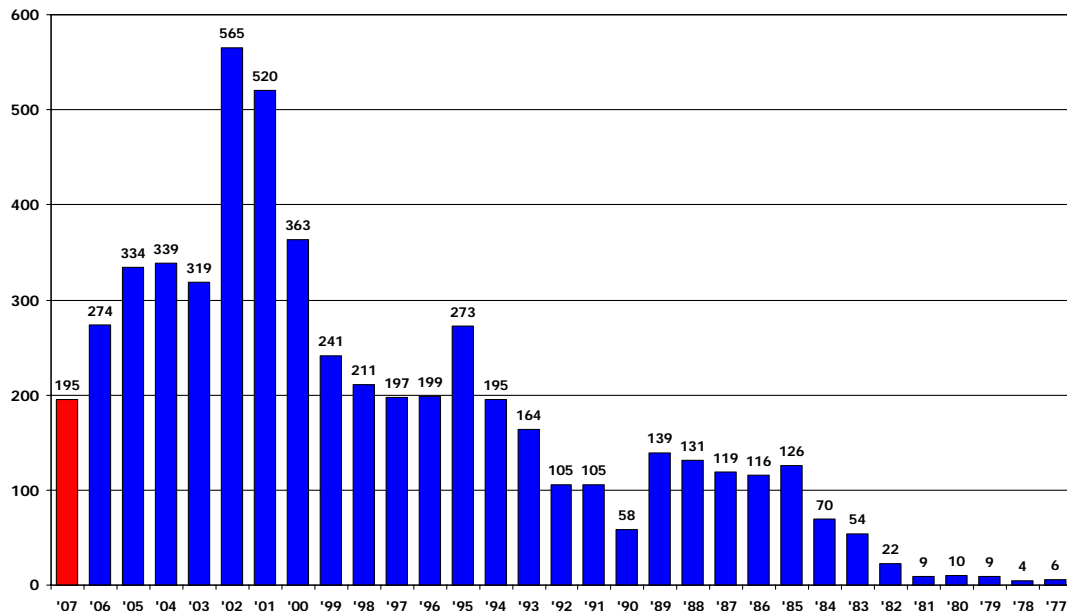


Figure 8. Career Field Manning per Year Group [87]

first in previous paragraphs and that is that career field management does not rank its officers. This is a critical initiative, one that would allow management to allocate developmental resources to those officers with the greatest potential, allow all officers to have relevant expectations based upon performance and potential, and allow career field forecasting and assignment of officers to key positions based upon performance. In the article Talent Pools, Jack Welch described this concept that he used at General Electric and it afforded management to allocate resource proportionately based upon impact to the business and potential. [89] The second facet is related to the first in that the career field management should prioritize the communications officer positions based upon

priorities—where management requires a higher performer in a more crucial position. Within the communications career field, all positions are equal other than command positions and by-name requests. This again depicts that the career field has no strategy to develop officers based on strategic moves—that grows experience. And the third facet is special duty assignments. These assignments include instructor positions and the like. According to the Air Force, AFPC allocates each career field certain quotas to fill during the year. What the communications leadership must do is deliberately send officers to these assignments for out-of-career field experiences with the understanding that they have a pre-determined emersion strategy upon their return to the career field. At this time, it's an ad hoc process—one that doesn't broaden communications officers in a deliberate manner.

Another program that does not broaden communications officers in a deliberate manner is the Aerospace Communications-and-information Expertise (ACE) Lieutenant Program. This program had excellent intent, though poor execution from the institutional level. During my exploits on the AFSPC IG Team, I spent long hours discussing the ACE Lieutenant Program with many junior officers—most disgruntled because they weren't having an impact on the mission. There were some exceptions, most notably the 21st Space Communications Squadron had an exceptional ACE Lieutenant Program because the commander and flight commanders were engaged in the program and mentored the lieutenants. However, overall, the institutional governance was lacking without clear mandates on developmental procedures—mirroring the developmental deficiencies throughout the communications career field. The book, *Human Resource*

Champions, documents that “...developmental assignments are based on the assumption that individuals learn from doing and that employees who are given new work challenges, will learn from the experience.” [90] I believe this is spot on, then again, under the premise of force development, all officers should be in some sort of developmental assignment where they are developing or maturing skills needed at the next level of their careers. This is precisely why in section 6, I’ll recommend canceling the ACE Lieutenant Program and treating the Lieutenants like all other communications officers as they grow and development their competencies and skills.

At this juncture, it’s noteworthy to look at the information technology that supports the communications officer force development program and career field management. Currently, the Air Force is using the T-ODP on the AMS system, housed at AFPC. The T-ODP allows communications officers to log into the system, document their career plans and desires, receive feedback and recommendations from their senior leader and posture for their next position. It’s a good tool for tactical-level planning for the next assignment, however it falls drastically short on forecasting long-term goals for the individual, their respective career field and the Air Force. Additionally, the communications assignment team does not document the mandated feedback on the T-ODP as stated earlier in this section, so the officer does not get the feedback needed to chart their career or strategy to build their competency base. For instance, on slide 18 of the Communications-Information Officer Assignments Briefing, assignment team members state the goal of the T-OPD is to broaden the officer’s perspective by seeking

positions in varying agencies and at different levels. [91] This concept runs contrary to the theme of deliberately developing officer skills and competencies.

In June 2006, AFPC will tentatively release its FDTK, which will be the single, central force development tool that provides the officers and their chain of command a place to document goals, developmental assessments and supervisor recommendations. [92] In reviewing a preliminary briefing on the system, it is a vastly improved tool over the T-ODP and allows more deliberate thought in strategically planning an officers career path. On the other hand, it's deficient in the fact that it does not track skills, training,

competencies, knowledge and job progression—key attributes in strategically and deliberately developing communications officers. The best it does is provide an

Reviewer Name	Signed	Date
David Ashton		07 JAN 2005
MAJ Corey Ramsdery		10 JAN 2005
MAJ Doyle Turner		12 JAN 2005
LT COL Alex Smith		14 JAN 2005

Figure 9. FDTK Screen Shot [93]

officer dashboard, detailing the officer's position status and a page allowing the chain of command to comment on the officer's leadership potential. An example is shown in figure 9. As I pointed out in section 2 and will again discuss in section 6, the Air Force has a great need to research industry and other military agencies, most notably the Navy, on what force development systems they're using to assist with employee development.

If the Air Force does this, then leadership will find out that programs and systems exist, that if tailored to our needs, will launch us into a viable force development program. At this critical time in our history, when technology is evolving at such a rapid pace—the Air Force and in particular, the communications career field needs to have an accurate accounting of our officers' competencies as current programs and systems will not get us there. My thoughts are summed up in a quote from an article, *Bring out the Best in Your Employees with Workforce Scorecards*, as it stated, “Most companies, says HR strategist and author Mark Huselid, keep a better inventory of widgets in their warehouses than of their employees' skills and contributions.” [94]

It's been consistently cited that the communications officer career field has no deliberate way to track officer development. And, even if the career field had a development strategy based upon skills and competencies, there is no mechanism or tool to manage the 4,000-plus communications officers world-wide. Without a strategy and without a way to track officer development, it's impossible to track success or effectiveness of developmental efforts. As discussed in the article, *HR Metrics and Analytics*, HR functions find it easy to collect data on process efficiency, but not on business impact or effectiveness of employee development on organizations. [95] This is apparent in the communications officer career field as the assignment team keeps a host of metrics on year groups, fill rates, and agency assignments—but not one metric on how effective their processes are in developing officers' competencies or skills. When I asked AFPC for metrics that gauge success of the assignment process, they provided me metrics on DT vector matches and officer preference matches. [96] Figure 10 on the next page

depicts an example of 2005 Summer Cycle vector matches. These metrics depict how efficient the assignment team is in matching faces to places, however it tells me nothing about the developmental successes. Nonetheless, if the communications career field developed a strategic human resource plan, then I'd believe management would find measurable metrics to track effectiveness and impact. The concept of metrics will be sprinkled throughout this research paper and most importantly discussed in depth in section 10. More importantly, with a good set of metrics, senior communications leadership will be able to make calculated decisions affecting the Air Force's strategic direction.

CGO's (400 officers)	FGO's (305 officers)	All Summer Movers (705 officers)
#1 DT Vector: 284 (71%)	#1 DT Vector: 203 (67%)	#1 DT Vector: 487 (69%)
#2 DT Vector: 64 (16%)	#2 DT Vector: 43 (14%)	#2 DT Vector: 107 (15%)
#3 DT Vector: 43 (11%)	#3 DT Vector: 20 (7%)	#3 DT Vector: 63 (9%)
Met DT Vector: 391 (98%)	Met DT Vector: 266 (88%)	Met DT Vector: 657 (93%)
Non-DT Vector: 9 (2%)	Non-DT Vector: 39 (12%)	Non-DT Vector: 48 (7%)

Figure 10. 2005 Summer Cycle Vector Metric [97]

Communications Officer Education

AFDD 1-1 states, "Education provides critical thinking skills, encouraging exploration into unknown areas and creative problem solving. Its greatest benefit comes in unknown

situations or new challenges. Thus, education prepares the individual for unpredictable scenarios.” [98] This quote falls in line with the adage that training prepares the officer for their current job and education prepares the officer for the future. When I asked the communications assignment team member what criteria they use to choose officers for educational opportunities, I did not get the response that they choose the best qualified officer based off of career potential. In contrast, the DT selects officers for educational opportunities based on a volunteer list—whether it’s the top officers with the greatest potential or not. The assignment team member did state that within a year, the manner in which they choose officers for educational opportunities will change—but the member did not go into specifics. [99] Hopefully the new process will be based upon highest potential and not restricted to a pool of volunteers.

There are various educational opportunities for communications officers to include AFIT, Naval Post Graduate School (NPS), Education within Industry (EWI), Marine Corps Expeditionary Warfare School (EWS), and off duty education. My intent, in my own thoughts, is not to go deeply into any one selection—but to expound basically on the concept of attaining education and how the communications career field currently does not deliberately plan or execute this aspect of development. Thus, the career field can’t measure return on investment or effectiveness of the education upon the individual careers or career field as a whole. If you step back and think about how much it costs the tax payer to send one communications officer to school for a year or more—and you’d surmise that the career field should be looking to measure its impact. For instance, when we send a communications officer to EWI, do we strategically match that officer with a

company who has expertise in a certain area that the Air Force wants to gain knowledge, or do we arbitrarily place them in a company? Do we require that the officer work in a certain specialty or research a particular topic with the output being a paper that contains knowledge that can be shared with the rest of the career field? Do we strategically assign the officer to a follow-on job where they can use skills attained at the company? I would say that the answer to all three of the questions is no—as we don't think about an officer as an asset containing a collection of competencies, skills and knowledge that can be used to maximize mission accomplishment. Another example would be sending an officer to the Marine Corps EWS. For the longest time, this course was used as bait—as the assigned officer, after course completion, had to go to the Keesler schoolhouse for a mandatory 3-year instructor tour. Is that not wasting the expertise, knowledge, skills and competencies gained at this prestigious school. I'd put the officer in a tactical unit or an expeditionary unit so they could share their knowledge—not at the schoolhouse teaching myriad courses, most unrelated to the acquired competencies. My point in these two instances is that the career field needs to deliberately think and strategize these moves and think about the career field impact. We don't do a good job at this!

When we send officers to AFIT or NPS, we do a somewhat better job because most AFIT students have follow-on assignments to advanced academic degree coded positions that are strategically placed around DoD so the military can use the acquired knowledge and research. However, I would caution that the communications career field should not restrict its choices to a volunteer listing because the career field is missing out on a premium opportunity of sending some of its brightest officers to AFIT or NPS for stellar

degrees in some of the most challenging, technological subjects. The rewards from opening up competition should be included in a strategic human resource management plan. On the same subject, the communications career field should capitalize on the certification courses offered at AFIT to include Systems Engineering and Information Operations, and with coordination others could be added to the curriculum. Again, any collaboration with AFIT or another institution needs to be deliberate and a piece of the overall career field management strategy.

No educational debate would be complete without discussing intermediate and senior developmental educational opportunities. Even though chosen by a central AFPC developmental board after careful consideration and recommendations by the DTs, the communications CFM and senior leadership should deliberately take this opportunity to grow its officers—based off of future potential. For instance, I will make the point with the AFIT Intermediate Developmental Education (IDE) 2006 class, currently preparing to graduate in June 2006. Within the class, we have an estimated 32 Majors that are communications officers. In thinking about this strategically, I know the DT and assignment team had very little control in who was selected for AFIT IDE based upon the downward directed AF/DP quota and the subsequent random selection process by the central AFPC board. However, after the selections, the DT had authority to place the officers in degree programs based upon career field requirements. At that time, senior leader briefings were touting technical competencies that included Systems Engineering, Information Operations, and C4I Systems. This was an opportunity squandered as 1 major attended AFIT IDE for math, 8 majors for C4I Systems and an estimated 23 majors

for the management degree program. After the standup of AFIT's Center for Systems Engineering based upon the urging by the former Secretary of the Air Force, Secretary Roache, only 1 of the 32 communications officers took a Systems Engineering Sequence as part of the C4I Systems program. I would caution in the future that the CFM and staff take a better look at developmental education to ensure, that if presented with a similar opportunity, the career field take advantage of the situation.

Finally, the career field management plan should emphasize the importance of off-duty education so junior officers don't procrastinate in getting their graduate degrees—if not presented the opportunity to attend AFIT or NPS. Especially with the current education letters from the Air Staff that stated advanced degrees will no longer be masked for major and above selection boards. However, great care should be expended when counseling junior officers of the value of an advanced degree. It should be explained that advanced degrees add value to the officer and they should consider either a degree in their career field or one that can supplement their current specialty. Currently, a Lieutenant at AFIT is conducting a thesis on the affects of a technical degree versus a non-technical degree on the careers of officers. It will be interesting to see and analyze the results.

Communications Officer Training

“While training is focused on the current assignment, development focuses on future opportunities, both in the current assignment and for greater responsibilities.” [100] This statement from *Future of Human Resource Management* provides the fundamental link between training and force development. Training is essential in developing officers to

perform in their current assignments and training builds a foundation of competencies and skills that the officers can use in future assignments. Within the communications career field, much emphasis has been placed on re-invigorating career field training from both the communications schoolhouse at Keesler for core career field training, as well as the technical training sponsored by AFCA through the officer technical refresh initiative. However, the career field has done a poor job at assessing the success or impact the training is having upon officer development or mission accomplishment. What I'm looking for is hard-hitting facts and impacts—that if consolidated, allow senior leadership to gauge training success based upon how the training prepared officers to achieve current missions and develop key competencies and skills. This concept of assessing training is very relevant in the civilian sector as explained in the article, *Measuring Human Resource Management's Effectiveness in Improving Performance*, where the organization must measure training impact, regardless of size or scope, and decide if it meets the goals and objectives. More importantly, the organization must assess whether the employee acquired the desired knowledge and expertise, whether the employee's performance improved, and whether the employee's new performance positively affected achievement of business goals. [101] Even though the career field has many quality training courses, to include a plethora of web-based training, leadership has not directed an overall training program or strategy modeled off what you'd see in the corporate world.

The main problem is that the communications career field can't show impact of training on mission success. Yes, leadership can speculate based off course surveys, but

the career field does not have a certification process that would allow leadership to gauge success—not to speak of the fact that the career field does not track officer's skills acquired from training courses. This problem sheds light on the training concepts found in *Beyond Training and Development*, where William Rothwell discusses four key problems with traditional training approaches: 1) training lacks focus, 2) usually lacks management support, 3) it's usually not planned and conducted systematically, and 4) it's normally not linked to organizational initiatives or strategy. [102] Each problem identifies a unique issue found in our current communications career field training, one that must be resolved in order to field a training program that supports officer development. In an e-mail from AFCA, their force development branch is working hard at mitigating the four problems, but they find it extremely difficult due to the broad scope of the career field and that it's hard to nail down concrete training when technology advances at such a rapid pace. [103] However, AFCA personnel are dedicated to refining career field training and it's the author's hope that they read and implement some if not all of the recommendations in section 6.

Under career field management, I touched upon the whole process of surveying the career field for tasks, defining those tasks during U&TWs, and then refining or developing the career field education and training plan. This is the stated process in Air Force Instruction (AFI) 36-2623 where the CFM uses the occupational survey to establish, change, or discontinues training programs. [104] However, if the AFOMS member does not take a good sampling, in this case 84 of 4,000-plus officers, or 2.1 percent, then the member will not acquire a good sample of tasks that form the basis of

the CFETP. Furthermore, if the AFOMS member does not randomly choose from many locations to gain samples, at various ranks, then the data or tasks will also be skewed, not affording an accurate accounting of career field tasks. What I'd rather see happen is the base lining of all 4,000-plus officer positions where leadership can categorize the positions based on competencies, skills and experience levels. Then, the training program manager could base all career field training on firm requirements—other than a survey of 84 out of 4,000-plus officers.

Figure 11 is a training diagram from the draft CFETP, dated February 2006. The diagram depicts the communications officer career field training opportunities. The training opportunities are divided into four categories which serve our career field well in

understanding what level training occurs at what periods in a career. However, it leaves me guessing about qualifications, competencies, skills, certifications and linkage to overall communications strategy—though it's a starting point and demonstrates that more deliberate

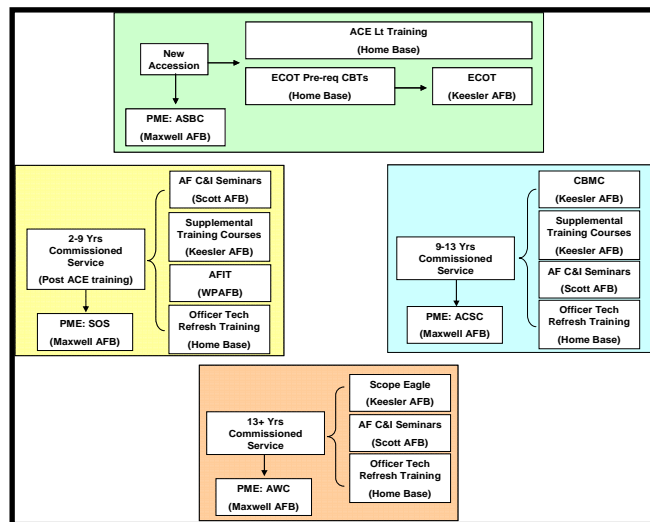


Figure 11. Typical 33S Training Opportunities [105]

thought went into this draft as compared to the original training plan of December 2003.

As with this improvement, the current draft CFETP is vastly improved over the first document—in the way it documents the tasks required by officers in certain specialties.

In addition to this improvement, the CFETP also assigns a proficiency code key that

allows communications officers and supervisors to understand to what level the officer is to be proficient on tasks. These improvements illustrate that deliberate thought and careful consideration went into modifying the CFETP by the CFM, AFCA, 333rd Training Squadron (TRS), and the U&TW. This is good because in future iterations in making the CFETP a better document, senior leadership knows that we have synergy among the various units who contribute to career field training. Nonetheless, I've recognized a flaw in that we're attempting to measure officer competencies based upon task allocation, patterned after the enlisted Job Qualification Standards (JQS) structure. [106] Officers should not be measured or quantified based upon tasks, but built according to skills acquired while working in the respective competency areas. Yet another flaw is that the career field does not store officer competencies or skills in a repository or database that serves as a map of the officer's development. It's been mentioned by AFCA that the career field will eventually store officer tasks in the Integrated Maintenance Data System (IMDS), a follow-on system for Core Automated Maintenance System (CAMS). [107] In doing so, the career field is basing officer development on tasks and not on skills—and doing so does not effectively grow officers. Not to diminish the point that with the draft CFETP, the career field is laying the groundwork for a development program—however, much work is still required in the training area.

As noted in figure 11, career field training opportunities, there's a multitude of training courses available to communications officers—based on analysis of duties as outlined in Air Force Manual (AFMAN) 36-2105 and the current CFETP. The 333 TRS

at Keesler offers a core set of 10 courses, of which two are mandatory at certain points in officers' careers. These courses are offered to communications officers as developmental mechanisms for the career field. In November 2002, Col Kovach, the former AFCA commander, sent a letter to the communications officers announcing the launch of the Officer Tech Refresh (OTR) Program—an initiative to augment the two mandatory courses at Keesler. As technical courses, OTR would fill training gaps witnessed in the 333 TRS course work—and allow officers an opportunity to expand or re-fresh their technical prowess. [108] OTR would become the officer version of the enlisted WAVE Technology training courses that re-invigorated the emphasis on training within the enlisted communications operator career field. Along with the OTR program initiative, AFCA also offers communication seminar courses, open to enlisted, civilians, and officers who meet course pre-requisites. I've found these courses to be a beneficial instrument in developing mid-level enlisted personnel, mid-level civilians and junior officers on base-level responsibilities. Additionally, the courses are professionally constructed and instructors are skilled and knowledgeable in their specialties. Other training avenues worth mentioning are the Information Technology E-learning courses sponsored by AFCA, the ever-expanding Air Force Institute for Advanced Distributed Learning (AFIADL) courses, and myriad courses offered by MAJCOMs and agencies that broaden the communications officer. Many courses are listed in Appendix A, communications officer competency listing.

The aforementioned list is a smattering of courses offered within the communications career field and on the periphery—and it emphasizes the keen importance of training on

force development. Nevertheless, I have four issues with the career field training program that leadership must address in order to have a viable training program. One, there is no one centralized office that controls or oversees the communications officer training program or the communications training courses. Currently, there are several organizations controlling courses without an overall emphasis on program control. Two, the development of and attendance to communications training courses are not based upon true requirements and are not linked to competency development or developmental initiatives related to communications officer positions. In 2005, 561 officers attended OTR courses—of which none are required to fulfill communications certifications or qualification tasks. Third, the communications officer career field cannot produce a cost-benefit analysis or estimate return on investment for the resources and dollars expended in the current course curriculum, whether outsourced or taught in-house. For example, in 2005, the career field cannot provide a return on investment for the \$965,455 AFCA spent on OTR courses. [109] And finally, the career field is not tracking which officers attended courses—not capturing acquired competencies and metrics to show an impact on officer development. The whole training emphasis is on acquiring expertise, skills and competencies to develop the officer and deepen the career field talent pool—and the communications career field is not accomplishing this task.

Even though the communications career field struggles with the overall concept of an institutional training program, several communications units are emphasizing the need for better training initiatives. I've already mentioned the 333 TRS as re-vitalizing their courses in the 2003 – 2004 timeframe based upon perceived needs in the communications

community. AFCA stepped up and realized the career field required technical courses to fill training gaps within the career field, and contracted the OTR courses. As I researched more into the training realm, I came across the Air Combat Command Director of Communication's (ACC/A6's) Training Transformation Strategy, which identified that "Inconsistent and nonstandard training oversight and management processes and policies continue to plague A6's ability to prepare critical communications resources..." [110] Even though the ACC/A6 staff identified this within their command and the ACC/A6 made it a priority—I would venture to say that it's relevant across the communications career field. Other notable training initiatives that are related to the communications career field are Air Force Special Operations Command's (AFSOC's) special operations schools, United States Air Forces in Europe's (USAFE's) postal courses, Defense Acquisition University's (DAU's) Acquisition Professional Development Program (APDP) communications certifications, and AFSPC's space and satellite courses. When communications officers attend these courses, they are broadened, they expand their competencies and skills, and they bring back valuable knowledge to their units and the communications career field. Finally, I would be remiss in my research and analysis if I did not acknowledge the many senior communications officers who, in lieu of a strong centralized training program, create developmental plans for their assigned communications officers that include deliberate training plans that grow officers' competencies, skills and knowledge.

The underlying training question remains—is communications officer training linked to officer development, and in a much broader context, to the overall career field

strategy? I would say that we develop officers through training courses, but it's not a deliberate plan or strategy that can be mapped out or measured. So, the answer would be no. One MAJCOM/Agency FAM in particular, stated that the communications career field should have a rigorous training and certification program based upon career field strategy and requirements much like Microsoft and CISCO do in the civilian sector. He further stated, "This ensures candidates [officers] have a core set of skills to enable success for the individual, position, and mission." [111] To do this as part of a great training program takes manpower, resources, governance, vision and strategy. And with the emergence of increased operations tempo, development of diverse mission capabilities, we can't afford to wait until later to develop an all-encompassing training program. It's the only way to succeed in future mission areas like cyberspace, information operations, and information warfare.

Air Force Communications Officer Force Development Closing

In this closing, I don't want to recap the last 40-plus pages—as that doesn't provide you, the reader with additional insights into my thoughts and desires. What I do want to do is provide you with a more condensed frame-of-reference as you continue reading this research paper. Foremost, I want to ensure that you understand that this section contained a constructive analysis of the current communications officer career field force development and management. I hope that senior leadership, peers and subordinates read this paper with an open mind and a desire to make the communications career field a better career field. We all have a stake in the outcome of force development, both personally and professionally—in the hopes that we perform our mission to the highest

possible potential. Before I continue, I think it's appropriate to portray my thoughts on writing this paper by quoting a passage from the book, *Competing for the Future*:

Corporate challenges will engender more frustration than fresh thinking if employees don't have the right to challenge corporate orthodoxies in their pursuit of better performance. We find it paradoxical that the empowerment that counts the most—the freedom to challenge standard operating procedures, workflow design, and bureaucratic procedures—is the freedom that is most often denied to first-level employees. [112]

The whole intent of force development is to create organizational capabilities that will allow leadership to accomplish the current and future missions. In the *Human Resource Champion* book, it states the leader “must be able to identify the capabilities critical to business success and to design and deliver the human resource management practices that can create those capabilities.” [113] In order for the communications officer career field to be successful in meeting what-ever mission comes its way, leadership must direct the implementation of a strategic human resource plan that encompasses both a human resource strategy and a human resource management strategy. Leadership must ensure that this strategic human resource plan directly interacts and supports the career field vision and mission—to include supporting future capabilities and strategy. If done deliberately, the strategic human resource plan will mitigate the risks associated with the many issues the communications officer career field faces today: lack of strategic training and education, lack of competency tracking, lack of defined career field growth, to name a few. The strategic human resource plan will also allow the career field to be flexible and agile to increased mission areas and manpower reductions. In essence, a comprehensive plan will accomplish what's stated in slide 3 of the Communications-Information Officer Assignments Briefing: “Successfully accomplish the full spectrum of

changing Air Force missions by developing a workforce with the required skills to apply current and future capabilities.” [114]

In the two sections to follow, I’ll describe what industry and other government agencies are doing in the realm of human resource strategy and planning as well as competency development in order to increase their business performance. As with technological advancements, financial forecasting and marketing, it’s important to survey the environment to see the opportunities and threats in hopes that leadership will set a vision to get the organization to the future. According to *Competing for the Future*, “It forces the organization to ask, what must we be doing differently today if we want to create this particular future—if we want to reach this particular future destination.” [115] This is the question the communications leadership should ask as they read this paper, strategize about the capabilities, and determine what human resource assets the career field requires to achieve future objectives. It’s my hope that sections 4 and 5 will emphasize the importance of having a strong human resource plan—as section 6 will provide the contents of the human resource plan.

IV. Government and Industry Human Resource Practices

Introduction

Business leaders understand that people are their prized and most important asset. As you progress through this section, you'll discover that the corporate world and even some of our federal government brethren are executing human resource strategy and plans very successfully and to the benefits of their organizations. They understand...they get it...that you don't accomplish business objectives without fueling the human capital asset as depicted in this passage from the book, *Roadmap to Strategic Human Resources*:

The creation of anything of value comes about through human talent. Products and services conceived, designed, manufactured, and sold by people. Ultimately, nothing is done that isn't initiated by people. If that is true, it is clearly that the effective management of people and the talent base that they represent is at the source of creating value. [116]

To create value, businesses manage their employees as assets as they do information technology, investments, marketing, finances and equipment. When leaders invest money and time into training and educating their employees, they call it investments, not costs—so they now have tangible assets that grow as time passes. And as the investments or employees grow, they become more valuable based upon their competencies and skills. These competencies and skills allow the business to prosper in challenging times as the organization evolves to achieve objectives. This is why businesses and their leaders invest time and resources in their human resource programs—to leverage the organizations to survive and prosper in changing times.

The communications career field leadership and CFM can learn a great deal from the civilian sector on how to manage human resources, especially in a time when leadership

is focusing on increasing mission areas while decreasing the force. In *Competing for the Future*, the author states, “It is not enough for a company to get smaller and better and faster, as important as these tasks may be; a company must also be capable of fundamentally reconceiving itself, of regenerating its core strategies, and of reinventing its industry.” [117] For the communications career field to handle increased missions, downsize the force, and continuously adapt to change, it must develop and implement a strategic human resource strategy that develops and manages its most important assets, its people. Ralph Christensen, in the *Roadmap to Strategic HR*, specifically cited a workforce plan that builds the foundation for a strategic human resource strategy. Essentially, he describes four actions that must take place to embed a human resource strategy and associated plan: 1) ensure that the human resource strategy is linked to the business strategy, 2) identify number and skills of employees required, 3) establish a transition plan to get from the current to future workforce, and 4) ensure the transition and the future workforce is grounded in business strategy. [118] Accordingly, to have a strategy and execution plan is paramount for businesses to stay competitive, keep costs down, while churning out profits for the stakeholders. Altogether, businesses that are flexible and agile adapt to change and treat it as the norm in the business cycle. They consistently analyze the environment, their competitors and their company’s health in order to maintain a competitive advantage. Michael Dell, in his book, *Direct from Dell*, states “Challenging the current state of affairs ensures that you don’t get too wrapped up in your success.” [119] He further elaborates that if you accept success, you’re managing

in the past—and that is not a good indicator of future success. So businesses need to look towards the future and align their human resources based upon future challenges.

Future challenges and the changing environment will drive companies to develop strategies that include all facets of their businesses—as is the case with the Air Force and more specifically, the communications career field. Two critical driving forces must happen to create the enabling efforts in developing strategy. The first comes from the book, *The Heart of Change*, where the author discusses the need for leaders at all levels to instill a sense of urgency in its employees. [120] This sense of urgency develops momentum within the organization—creating prolific results caused by a common strategy and combined efforts of its employees. In the book, *The New Strategic Thinking – Pure & Simple*, Michael Robert highlights this common strategy by stating, “The single most important element common to companies that attain long-term success...they have clear, coherent strategy that they pursue with singularity of purpose; they have total dedication to it and no deviation from it.” [121] The best leaders in industry understand that there’s not an endless supply of capital, people, technology—and those businesses that succeed must have a coherent strategy that not only focuses on the present, but allows them to change to meet future challenges.

That’s why it’s important to discuss human resource strategy and management in context of the civilian sector and other federal agencies. For the most part, the civilian sector and other federal agencies are affected by the same environmental factors as the Air Force—so Air Force leadership can learn from industry and apply those lessons to military operations. In this section, I’ll discuss human resource’s past, human resource’s

present and future, employee positions and assignments, education and training, human resource management structure, and then discuss how industry is measuring the impact of human resource management. Upon completion, you should have a clearer picture of industry's strategic view of human resources.

Human Resource's History

Today, as the Air Force wrestles with the concept of force development, industry decades ago grappled with the concept of human resource strategy and management. In the past, human resource leaders did not have a stake in business strategy and thus, employee development and management was detached from the organizations vision. The human resources department resided deep in the bowels of the organization and line managers found little assistance from human resource managers—so they gained no credibility. Since human resources had no connection to strategy, development and training opportunities received minimal funding and departments were left to develop their own employees. Not until the last several decades, did corporate leaders start to view their employees as strategic assets, ones that can grow and development, positively affecting the bottom line of the organization. The book, *HR Value Proposition* points out why leaders started to view employees differently by stating, “Speed of technological innovation, increasing global competitiveness, increasing customer choice, and increasing shareholder demands mandate that firms must innovate and improve to stay alive and prosper.” [122] These changes and the need to innovate prompted leaders to look at their employees through a different lens, the strategic human resource lens—as leaders considered employees to be human capital assets that required investment. By

investing in employees' growth and development, leaders gained increased productivity, creativity, and efficiencies—all required to gain or maintain a competitive advantage in any market.

As business leaders began to view employees as human capital assets, leaders looked to human resource departments to plan how to develop employees in a systematic manner. This was a mindset change for human resource managers, who had to step back and contemplate how to do more than merely counsel employees, hire and fire, answer benefit questions, move employees to different jobs, and monitor time cards. Leaders were now asking human resource managers to strategize about how to develop employees who in turn would fuel the organization's performance in creating a competitive advantage in the market place. According to the article, *Talent and the New Paradigm for Human Resource Management*, in the past, line managers found it difficult to connect what human resource's job was and how it related to the overall business strategy. [123] This is because human resources was more focused on the tactical actions associated directly with personnel actions and not focused on the strategy and business success. This must sound familiar with what you read in section 3 about the execution of communications officer force development—and rightly so. However, just like the Air Force leadership, the light bulb came on and corporate leaders realized that human resource professionals should become strategic business partners. This meant that human resource managers would design human resource practices that aligned and positively impacted business strategy, performance and overall financial health of the company. [124]

Before this revelation, the human resource department was treated as a function, moving employees around like manufacturing widgets in an assembly line. As a function, line managers gave no credibility to the human resource department for creating any value within the organization. Additionally, there was the fact that human resource practices were not defined to the point where leaders felt confident in letting the human resource manager strategize about employee assignments and deliberate moves. This was further expounded upon in the article, *Talent and the New Paradigm for Human Resource Management*, where the author wrote, “Organizational decision processes and tools employed in the talent market are far less mature and refined than those used in finance or marketing.” [125] However, as leadership changed their mindset and realized that human resource capital was an investment, one that had to be managed, they started to link employees to business strategy. This metamorphosis was thoroughly explained in *Competing for the Future*, as a discrepancy between the external environment and internal environment spawns organizational transformation—and that’s what happened with human resource management. [126]

As leadership started to see human resource as credible, they started to entrust them with more responsibilities, to include business strategy. Nevertheless, there were still leaders and high-ranking managers who wanted proof that human resource management was impacting the bottom line of the company. These managers could measure the impact that finance, marketing, accounting, and even information technology as they could see that these functions provided results in order to achieve company objectives. These same managers wanted to see tangible, quantifiable results on a balance sheet. In

HR Metrics and Analytics: Use and Impact, it was clear “...HR lacks the type of analytical and data-based decision-making capability needed to influence business strategy.” [127] In the article, the author concluded that most companies could not measure results or impact because they did not keep the correct metrics or analytics. In the past, and to some extent today, human resource managers instructed subordinates to measure human resource accomplishment by how many people were assigned, or how many hours of training—when in fact these metrics only measured process efficiencies or simple head counts. [128] Even though the tide is changing and human resource managers are beginning to create strategically-based metrics, much debate continues about what type of metrics are useful and will anyone research the impact of human resource management. These and many other tangible issues are being addressed by corporate leaders as they mold the human resource structure of the future. The success of companies, entire countries’ economies, and people’s career rely on the application and execution of good human resource strategies and plans.

Future of Human Resource Management

The future role of human resource management and strategy are at the crux of a successful organization. With the dynamic explosion of technology and industrious energies in many markets, leaders have to continually renew their corporations—and an agile human resource strategy allows companies to maneuver in changing times. As such, companies are placing great emphasis on employee development and expending huge expense on human resource management plans in order to stay competitive in their respective markets. This theme was stressed in *The Workforce Scorecard* as the authors

discussed managing human capital to execute strategy. In the book, they stated, “It [strategy] requires CEOs and senior managers to think differently about what it means to manage the workforce effectively and, most importantly, how they measure workforce performance at the level of the organization.” [129] This focus on human resource management and the workforce aids leadership and the organization as a whole to strategically examine its core competencies and more effectively align the workforce to accomplish the capabilities required for business success. Just last week, I reviewed a briefing from the Air Force’s Headquarters, titled AFNetOps Transformation in which the authors stated that 59 percent of the communications officer career field will be cut—I assumed by fiscal year 2011. [130] After I fell out of my chair, hit my head on my desk, and minutes later regained my strength to resume coherent thought, I scoured the briefing for any logical strategy that linked the communications future initiatives with a 59 percent cut, or approximately 2,300 out of 4,000-plus communications officers within the next 5 years. Suddenly, I came to the conclusion that the cuts were downward directed, with no rationale strategy to support the cuts. As I stated in section 3, career field leadership does not have a baseline of the communications officers’ competencies, so how can any tiger team or leadership mandate a 59 percent cut without analyzing the career field competencies, required capabilities and future mission areas. This example of randomly making cuts and then going back to justify with after-the-fact strategy development gets to the heart of what Mark Huselid and Brian Becker, two renowned human resource strategist, discussed in their book, *The Workforce Scorecard*. Organizations need to link human resource strategy and management to the

organizations' business strategies, and not the other way around. [131] The workforce, through its competencies, enables capabilities that aid the organization in achieving the mission. It's not negotiable!

As companies view the workforce as a strategic enabler, leadership at various levels define human resource roles—as they become a strategic partner in business success. The book, *Human Resource Champions* identified four roles that human resource departments must grasp to effectively manage employee workforces. The first role is for the human resource department to link human resources to business strategy. I discussed this in the Air Force example in the last paragraph. The second role is for the human resource department to take on structure. This means the department will develop a human resource strategy—a continuous method to evaluate the strategy against the organization's business strategy. Third, the human resource department will serve as an employee advocate. This requires the department to understand the core business and counsel both the employees and leadership on how to gain synergy between employee development, resources and mission success. And finally, the human resource department must have a seat at the senior table. This ensures that the human resource leadership will contribute to organization strategy, and other leaders will have insight into workforce competencies and collective capabilities. [132] These four roles will be peppered throughout this section as I write about the fundamental human resource concept.

It's been acclaimed often that human resource or workforce strategy is linked to the organization's strategy. I would even go as far to say that a human resource strategy

cannot be developed without a business strategy. The article, *Does Your Business Need a People Strategy* reaffirmed my thoughts by citing, “The strategy process provides natural milestones for considering the people priorities and the business strategy provides the information required to connect people priorities directly to business plans.” [133] This article, as does the book, *Human Resource Champions*, confirms that there needs to be a strategy process, and the initial step is business strategy before all else—and the all else includes budgetary cuts, manpower cuts, marketing cuts and the like. Mark Huselid, in his article, *Bring Out the Best in Your Employees with Workforce Scorecards*, recaps the connection to strategy by stating that “The process needs to begin from the top down—from strategy to workforce to HR function—and be grounded in a very clear understanding of how the workforce contributes to the firm’s success.” [134] This is the essence of the new human resource impetus, as the human resource department, division, or section will be a strategic partner—on equal footing with other capability-producing units to include accounting, finance, marketing, advertising and information technology, to name a few.

As a strategic partner, human resource managers and staff must possess keen situational awareness of the business’s environment, future initiatives, and market drivers to prove their worth to leadership. This lends itself to the credibility that human resources bring to strategic planning. In 2005, RAND authored a report on this very same subject, describing how the Army plans for alternative futures based upon DoD strategy. In the report, RAND discusses that the Army is working hard to develop the force structure required in the 2025 timeframe based upon strategy. However, RAND

explains that it's tough for the Army or any other organization to plan that far in advance while immersed in an environment fraught with uncertainty and change. [135]

Nonetheless, RAND documents that the Army is pursuing human resource strategy based upon organizational strategy. More importantly, those leaders in the Army charged with developing and managing human resource strategy are strategic partners with other leaders creating and molding future mission strategies.

The human resource manager, as a strategic partner in the organization, concentrates on the connection between strategy and workforce talent, and its development.

According to figure 12, from page 52, *Roadmap to Strategic HR*, workforce talent is the central focal point of the organization's capabilities with the emphasis on creating a competitive advantage in the market place. [136] As you study figure 12, you can see

that the author demonstrates that workforce or talent development directly links to organizational capabilities that in turn allow the organization to achieve its strategies. The workforce plan or in other words, the human resource strategy fosters the organization's ability to accomplish the strategy—and creating

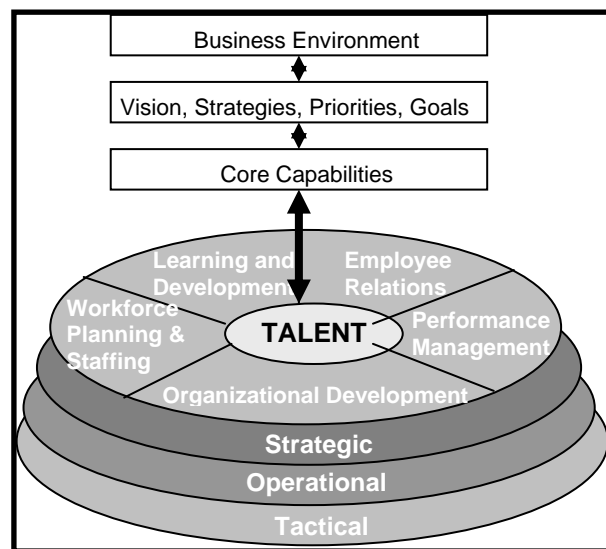


Figure 12. Strategic HR Framework [137]

the competitive advantage. [138] Once an organization has a human resource strategy, that's linked to business strategy, it has a blueprint that maps out the strategic path of the organization within its environment. In the past 2 years, the Navy realized that it needed

a human resource blueprint or strategy and founded the Sea Warrior program. In the article, *Sea Warrior: Maximizing Human Capital*, the Navy explained that it needed a human resource strategy that linked its manpower development to overall warfighting strategies. This would enable the Navy “to build the sailor to run the Navy our nation demands.” [139] In starting this human resource endeavor, the Navy’s personnel leadership have become a strategic partner with the senior leadership to forge ahead to meet future challenges.

The theory of human resources being a strategic partner is practiced in many companies to include Dell. At Dell, the employees know how their jobs enable the company’s competitive advantage and they know how their jobs drive corporate success. Additionally, the employees are quite aware that their innovativeness and competencies are attributes that allow Dell to continually create new and different ideas on how to compete in their industry. [140] The employees and company’s ability to continually innovate makes the workforce a strategic asset and the human resource department that manages the assets becomes a strategic partner. And as stated in the article, *Building a Better Workforce*, “When people are engaged, they give their discretionary energy to the company, their best-quality work, and companies benefit enormously from that, even if they can’t quantify it.” [141] As alluded to in the article, in companies where human resources are directly linked to strategy, the employees feel engaged—like they’re making an impact on the mission and that’s a direct result of human resources being a strategic partner in the company.

The human resources organizations will evolve as strategic partners as it assumes more fundamental planning roles within businesses. In assuming greater roles, human resources will implement institutional processes that allow greater management functions with businesses. For instance, in the article *Driving Strategic Success Through Human Capital Planning*, Corning implemented a human capital planning process that improved its ability to forecast employee competency requirements, enabling the company to meet its goals and objectives. [142] Corning is not alone in this endeavor as many companies institute business-level human resource processes that increase business performance by leveraging the company with a strong talent management program. A related human resource process is the mission area gap analysis that human resource leaders use to identify gaps between required mission competencies and internal talent or competency pools. According to the article, *Developing Staffing Strategies that Work*, the author explains that identifying required mission capabilities is hard given the rate of change; however, a process must be in place to identify with some precision, those competencies required by its workforce to successfully accomplish the mission. [143] The human resource department should continuously execute this process by re-examining the business' internal and external environment and discussing options with senior leaders at executive meetings. The *Zap the Gap* book explicitly captures the importance of identifying gaps when it cited, "Gaps cost organizations billions every year. When people do not work at their best, everyone loses—the customer, the organization, the employee." [144] As organizations adapt to change in order to stay competitive, the

human resource capital planning process and the gap analysis process are essential and will be found in the organizations human resource strategy.

All the things I've discussed over the last four pages are part of a human resource strategy. According to a March 2002 GAO report on Strategic Human Capital Strategy, a Human Resource or Capital Strategy consists of leadership commitment, human resource planning, talent development, and performance measurements. [145] These four facets are the cornerstone of human resource strategy and are touted in industry as the foundation for business successes. At Corning, they use human resource planning as part of strategy to improve its ability to forecast human capital impacts on corporate strategy in order to provide better human resource services. [146] In companies like Corning, the four facets of strategic human resource strategy enable leadership to focus employee development towards needed capabilities which feed the achievement of the organizations' goals and objectives. In addition to achieving business success, a strategic human resource strategy also provides the firm with a deep and logical decision science for talent. As indicated by the article, Talent and the New Paradigm for Human Resource Management, the author noted that "...a talent decision science is a source of competitive advantage, just as decision sciences for financial and customer markets where in the previous century." [147]

Why all this effort towards developing a strategic human resource strategy, now of all times? Michael Dell answers this question in his book, *Direct from Dell* by explaining that companies cannot rest on their past successes. Companies must discover new ways to be more efficient and effective, whether in good times or bad because if you stop

improving and adjusting to your environment, your competitors will beat you. [148] The way to improve operations and become more efficient is to fuel the employees that make it happen—and that's by implementing a human resource strategy that grows employees from initial hire through to retirement. For companies to accomplish human resource strategy and subsequent planning, the business emphasizes defining numbers and types of talent, identifying gaps between required competencies and employee competencies, and implementing staff actions as part of the plan to mitigate the talent gaps. [149] These are the practices a human resource organization takes to develop employees to achieve mission successes.

A company develops employees by taking stock of their employee competencies and maturing those competencies to create capabilities within business units. The book, *Roadmap to Strategic HR* identifies the development of competencies to create capabilities as the vertical alignment between talent and the marketplace. [150] Every action the human resource department does should be focused on creating and aligning these competencies to gain competitive advantage. In the article, *Supplying Labor to Meet Demand*, the author explains how IBM built a taxonomy that cataloged 100,000 employees according to their competencies so leadership could have a accurate view of its labor-supply-chain activities. [151] This is where I ponder the future of the communications career field and wonder, with all the projected cuts and evolving mission areas, how leadership can make estimations without clearly and definitively knowing its officers' competencies. If IBM can do it for 100,000 employees, than the communications career field, with all its technology, can do it for 4,000 officers.

To develop and account for an organization's competencies or better yet, talent, it takes deliberate planning by personnel charged with human resource tasks. Human resource personnel should look for employees with potential to succeed in the environment the company operates within. This is a deliberate act to find those employees who are the best learners, those who can deal with change, and can adapt to new organizational structures. [152] More often than not, the poor talent decisions are made by those leaders outside the human resources realm who do not have the experience to link the decisions to future potential or business strategy. [153] United Parcel Service provides a great example for linking competencies to business strategy as the company deliberately develops employees as part of their "Winning Team" strategic imperative. The company's human resource efforts attract, develop, and retain a skilled, motivated workforce that is knows the business strategy and their role in making the company successful. [154] Many companies, like UPS, manage their employees' competencies and in doing so, create employee portfolios of similar competencies and talents—making it more efficient to align resources with business capabilities and strategies.

The Navy provides an excellent example of managing their sailors according to individual development plans with the emphasis of a greater resource of talent in a portfolio-type manner. For instance, each individual is loaded into their navy human resource management system, using a career continuum of training, education and duties that grow and develop the individual. [155] However, if the Navy requested a list to see how many individuals were qualified in a certain competency, they would get a list of qualified candidates. This allows the Navy to develop each individual according to a set

plan while maintaining continuity for a grander, institutional view of human resource management. I would go one step further as leadership can now query a management system according to the strategic importance of the competencies in accomplishing the mission. For instance, if a company was bringing on a new mission area that required increased personnel numbers with a certain competency, leadership would query the system and get a list of names matching the defined competencies. [156] What this does is allow human resource personnel and leadership to work hand-in-hand in ensuring the right people, with the right skills, are assigned to the right jobs.

Leadership, line management, and human resources have to synergistically work together to optimize workforce development and growth. This concept goes back to human resource management as the separate groups must define requirements and plan to get the appropriate employee in the right job. In the article, *Nine Steps to Making the Most of Your Metrics*, the author cited a survey of 200 human resource directors, of which 82 percent believed human resource management is critical to the success of businesses. [157] Part of human resource management is strategizing about the employee development in order to get the “right” fit of people in the “right” jobs so they can perform. The Navy is doing this in their Sea Warrior program as their system identifies best-match fits between positions and sailors who have specific competencies. Moreover, in the article, *Building a Better Workforce*, it describes this process as workforce optimization which “combines managerial discipline with newer forms of information technology to produce, in theory, everything from perfectly staffed assembly lines to efficiently deployed consultants to well-crafted succession plans.” [158] Some

personnel call it human resource management while others call it workforce optimization—but both parties would consider it smart and practical business sense.

There's a myriad systems and technology on the market that provides employee career tracking. Some systems, like the ones Microsoft and General Electric use, are built specifically for their company's use and tailored to accommodate their leadership's structure. Other employee tracking systems are developed by companies like Peoplesoft or SkillNet—who take an already established system and modify it for the company's benefit. Either way, it's good business for company's to have an internal system that tracks employee skills and competencies. The Vice President of Marketing at Kronos, Inc, a leading vendor of workforce-management software stated, "If organizations view employees as assets, then it follows that those assets should be allocated effectively."

[159] He further goes on to say that his company's software provides such capabilities as staffing, development, and tracking of employees. These are all key tasks in growing company employees to achieve the objectives and goals of a firm.

You have the processes, you're growing employees, the bosses are somewhat happy, and the business is performing successfully—and then one day, leadership asks for proof that the resources are gaining a return on investment. What leadership wants is what's outlined in the article, HR Metrics and Analytics, and that is human resource effectiveness metrics describing if the current human resource practices have the desired effects. Leadership wants to know if the employees are growing the desired skills from attending education and training courses, are they growing knowledge and experience from job rotations, and are they successfully accomplishing job tasks. [160] Only until

recently were these questions and measurements being asked of the human resource professionals. In the past, human resources provided simple metrics like how quickly they filled jobs or how much money did they spend on training. According to the HR Metrics: A Must—Future Focus article, leadership is asking the tough questions that depict whether the human resource strategy is developing the talent that positively impacts business success. The article goes on to explain that as human resource professional develop the skill to adequately measure impact and effectiveness, their profession will gain credibility—advancing the human resource practice. [161] The most important lesson to take from this discussion is that a good measurement program along with a strategic human resource strategy allows leaders to make business decisions based upon facts, and not speculation.

Human Resource Assignment Task

One of the primary jobs of human resource professionals is to work with line managers on choosing and assigning employees to positions. This is part of the overall human resource strategy and according to the book, *Winning*, Jack Welch stated, “Getting strategy right also means matching people to jobs.” [162] Of course, this means that both human resource professionals and line managers research potential candidates, evaluate their competencies, and then make the tough decisions on who to hire. In talking about hiring, Michael Dell states in his book, *Direct from Dell* that “The ability to find and hire the right people can make or break your business. It is as plain as that. No matter where you are in the life cycle of your business, bringing in great talent should always be a top priority. It’s also one of the hardest objectives to meet.” [163] However, if accomplished

with due diligence and careful consideration, assigning the right people to the right positions can create business synergy and performance beyond expectations—allowing the business to achieve goals and objectives.

Great thought and devotion should be put towards hiring or assigning employees to positions. Some human resource strategist comment that if not part of a strategic plan, merely moving employees to different positions, is like playing checkers—all the pieces have the same moves. A more strategic outlook would be to deliberately, and with great forethought, move employees to positions as if you were playing chess—as each piece at certain moments has a discrete strategy. At Hallmark, leadership takes this approach as part of their succession planning where each earmarked employee is strategically placed in positions—positions that are vital in accomplishing Hallmark’s goals and objectives. [164] Then, leadership monitors their ability and drive in accomplishing their respective mission—while inherently developing them for the next higher position. This highlights the point that all position assignments should be based on future employee potential along with the long-term strategic vision of the organization. If accomplished in tandem and successful, the employee and organization both benefit from the match between competencies and capabilities required to achieve the mission. The Navy’s Sea Warrior program accomplishes this very feat, as detailers assign sailors to positions based upon the two aforementioned attributes, sailor current competencies and future potential. [165]

The bottom line is that companies are putting employees in positions to grow competencies and skills, develop new skills if desired, and to best maximize their potential to perform—accomplishing the organizations’ goals and objectives. The Navy

does this to grow their sailors and to allow for increased operational readiness within the fleet. As sailors move into new positions, they develop knowledge, skills, and abilities that they may not have acquired if put in another, less challenging position. [166] This is an example of deliberately growing employees to meet future missions while accomplishing the current mission. Some people call this job rotation—moving people to new jobs just though they get a change of scenery. To some, this is a good idea, but to others, it negates the opportunity to grow in the current job and ruins synergy or working knowledge of the organization.

With all the changes occurring in the communications career field and the proposed changes in organizational structure—it would be prudent to discuss structure. However, organizational structure is not the intent of this paper. The intent is to discuss how the communications career field manages its human resources and what it needs to do to better. Nonetheless, it's appropriate to discuss job positions from the knowledge lens. Why is it that the communications career field doesn't have all job descriptions documented in a repository according to mandatory competencies, skills, knowledge, and abilities? Why is it that when the communications career field outsources a position or requests a civilian hire, the requestor is tasked to fill out a thorough job description with mandatory skills and knowledge? There seems to be a disparity between what's required for one category of manpower and another. In the civilian sector, positions have job descriptions with associated skills, abilities, education, certification and experiences. These provide the hiring official and human resource personnel with hiring criteria to compare against the potential employees. At Dell, they use job segmentation to facilitate

various levels of jobs in which certain skills are required based upon the level of the job. [167] This allows Dell to hire or transfer appropriately skilled employees to work in jobs that will develop their skills—while the employees achieve business objectives. The Navy’s Sea Warrior program accomplishes the same feat—assigning sailors to jobs based upon qualifications requested by the hiring official. [168] These two examples provide a context for what industry calls position strategy—assigning the right person to the right job based upon pre-requisite skills, abilities, knowledge and experience.

Organizational Training

Civilian companies are treating their employees as investments and not costs—providing them with training and education in the hopes that the employee’s performance improves and they become better engaged in the organization. According to the article, Race for Talent, “Engagement is a mutual contract between the employee and the employer. Employers have a responsibility to train leaders and build a meaningful workplace, and employees have a responsibility to contribute to an engaging workplace.” [169] In this setting, both employer and employee benefit and the employee acquires the needed skills to perform. In the article, Sea Warrior – a True Revolution in Training, the article explains how the Navy is training its sailors to be proficient in the current job as well as their projected next job. [170] This demonstrates how the Navy is growing their sailors for progression by mapping training to their next job. This strategy is also demonstrated in human resource practices within industry—mostly witnessed in the succession planning initiatives. From a 2004 RAND report on the Air Force Procurement Workforce, RAND described how SmithKline Beecham launched a career-planning tool

that mapped training to career progression for all its employees. This tool standardized the way SmithKline Beecham conducted training worldwide and provided a method for human resources to link required skill sets to career progression—so employees could start developing their talents in the present for future positions moves. [171] In linking required skill sets to career progression, employees can now development individual development plans so supervisors can gauge employee development and growth initiatives.

As depicted earlier, industry is concentrating heavily on training as it presents opportunities to develop employees and provide them with the required skill sets to succeed in current and future positions. The question arises, as with other functions in the organization—on how does the company measure return on investment for the resources expended? The article, *Measuring Human Resource Management's Effectiveness in Improving Performance*, outlined three ways to measure return on training investment: 1) how well did the employee learn, 2) how effectively did the employee apply the knowledge, and 3) what measurable difference did it make to the business. [172] These are not the only measurements applicable to measuring training effectiveness and to some extent, these measurements are hard to quantify, however it's a beginning to justify training. The most noteworthy reason industry must identify ways to measure training effectiveness is that according to the American Society for Training & Development, US companies are spending more than 60 billion dollars annually on training and development. [173] The amount of money spent on training in 1 year warrants a way to measure the return on training dollars.

Human Resource Structure

In the civilian sector, human resources department within a company performs four basic categorical services as listed on page 226 in the book, *Human Resource Champions*. The first function is human resource strategy in which human resource personnel assess the environment, identify organizational capabilities, and formulate and implement people strategies. The second function is administration in which human resource personnel provide information services, administrative support, and compensation and benefit services. The third function is employee development in which human resource personnel execute a human resource management plan to develop employees. And the fourth function is organizational development in which human resource personnel implement processes and policies that shape the organization's environment. [174] All together, the four functions create an organization structure that enables human resource strategy and increases the synergy between that strategy and the overall business strategy. As stated in *HR Value Proposition*, "The HR function must create strategies and organize resources so that individual efforts of HR professionals combine to create value." [175]

As the human resource department creates value, leadership looks to the professionals to manage the human resource strategy. In the same light, leadership puts the human resource leaders at the executive table as a strategic partner in determining the future of the organization. A relevant and eye-opening passage from *Future of Human Resource Management* nicely frames the value placed upon human resource management:

In today's business climate, the opportunity is there for HR to claim responsibility for the productivity of the corporation through the

maximization of human intelligence, interaction, and skill. Human productivity, whether in manufacturing, engineering, marketing and sales, R&D, or administration, is what ultimately drives all external measures of a corporation's success: share price, return on stockholder equity, growth rates, and so on. [176]

The passage shows the amount of trust leadership places upon the human resource professional to build the competencies and skills to enable corporate capabilities. For the human resource professional of the present, this provides leverage to make impacting change on the company's operations—and if successful, build credibility among leadership. Jack Welch, in his book, *Winning*, stated “Without a doubt, the head of HR should be the second most important person in any organization.” [177] Coming from Jack Welch, this is an incredible shot-in-the-arm for the human resource field—to be given such an accolade from an accomplished former CEO. But, the final thought is that if human resource personnel are going to be charged with developing employee wealth as a strategic asset—then they're given the proper authority to make organizational impact.

What type of experience and training does a human resource professional require to be competent at their craft? According to *Future of Human Resource Management*, a human resource professional should be experienced in five areas. The first area is HR Knowledge, where the individual knows how to recruit, staff and measure impact. The second area is HR Technology, where the individual understands the finer points of Internet recruiting, tracking and measurements, and overall organization technology strategy. The third area is Personal Credibility, where the individual possess good communications skills, nurtures relationships, and is a person of high integrity. The fourth area is Business Knowledge, where the individual knows labor constructs,

organizational structure, and value chain applications. The fifth and last area is Strategic Contribution, where the individual is keenly aware of how human resources contributes to organizational goals, understands the culture, and comprehends strategic decision making. [178] The reader must understand that the longer an individual works in the human resource arena, the more qualified they will become—and of course, the more attributes they will accumulate. At the start of a human resource career, it is not expected to possess all the attributes listed above.

To be successful as a human resource professional, it requires the individual to continuously learn about the profession as well as the business and market. The human resource professional must continuously hone their skills and prepare for changes in the environment. [179] As professionals, employees will look to the human resources department and expect the individuals to possess the knowledge to make strategic decisions that affect the employee, the organization, and its business success. The human resource professional gains knowledge and skills from increased training opportunities, seminars and workshops. The kind of skills and competencies they acquire through training and experience are the ability to increase employee performance, predict skill level requirements, match individuals with jobs, drive strategy, and measure effectiveness of human resource processes. [180]

In today's business environment, human resource professionals require immense skills to manage corporate workforces. They are valuable business partners and strategists—executing a game plan to develop employees, create structure, drive strategy. They are no longer considered paper-pushers who assign benefits and administer pay scales.

Human Resource professionals are on the cutting edge of business strategy—strategically maneuvering employees through corporations as if they were playing chess. And finally, as a human resource professional, they advocate for employee rights and provide a voice to senior leadership on plaguing issues. Some even look at them as “human capital developers.” [181]

Human Resource Measurements

Human resource measurement is realistically, one of the hardest tasks to accomplish, yet an important task to gain credence that the human resource strategy is effective and cultivating results. This is why I dedicate a whole section to measurement at the end of this research paper and why peppered throughout the paper, you’ll see references to measurements. In the article, *Key Trends in Human Capital*, it stated, “Measuring and reporting on human capital is not only a fundamental ingredient of sound corporate governance, but an essential step towards building sustainable organizations deserving the confidence of their stakeholders.” [182] This is critically important for the human resource profession as it’s very difficult to show return on investment as it relates to corporate effectiveness. For human resource leadership to show effectiveness, they must measure how employee development and sound business practices affect the bottom line of the company. In the book, *The Workforce Scorecard*, the authors present three fundamental challenges that impede successful measurements: 1) Perspective Challenge – all managers don’t understand how workforce competencies drive capabilities, 2) Metrics Challenge – has the human resource department identified the right measures, and 3) Execution Challenge – does the leadership and line managers have access, and do

they use the data to make change. [183] These are the challenges to overcome in both industry and within the communications officer career field—especially with the increased emphasis on downsizing the force.

V. Government and Industry Competency Development

Whether you're in government or the business sector, talent is the quintessential asset the organizations require to meet goals and objectives. Talent doesn't just pop up at the snap of the fingers, but takes systematic efforts to find as well as nurture to achieve an organization's strategy. In the book, *Roadmap to Strategic HR*, it states, "Finding talent over the course of the next two decades will be one of the greatest challenges that organizational leaders will face. These leaders will find it far easier to find capital and technical resources than talent." [184] With the baby boomers hitting retirement age and far less students graduating with technical degrees, it's becoming increasingly difficult for companies and government for that matter, to find talent to fill job positions. The author further goes on to highlight that "I am not talking about finding someone to fill the space. By talent, I mean people who clearly bring the right competencies (skills, knowledge, and aptitudes) that are vitally needed to fulfill the business strategy." [185] This is the unenviable task that human resource professionals face in the upcoming years—not just to get faces in places, but to hire employees that impact the organization's bottom line. The authors of *Talent Force*, Rusty Rueff and Hank Stringer, equate this task to the operation of an organization's production supply chain where businesses must work at making it more efficient. The same holds true for the talent supply chain, as human resource professionals are analyzing and benchmarking how to attract and develop the best talent. [186]

With the difficult, yet doable human resource task of acquiring, developing and then tracking talent, organizations are implementing extensive procedures and systems to

ensure they're developing employees according to competencies and skills. As such, organizations institute talent management programs, and directly link them to the organization's strategy. Furthermore, within the talent programs, human resource professionals have competency strategies, stating how they develop talent, outline their responsibilities in doing so, and how they track and measure development—linking it to overall human resource effectiveness and business success. These are the discussion points expounded upon in this section.

Talent Management

Organizations are focusing on making talent management more than a procedure, but building a concept that makes talent management a science—one that is analytical and measurable. According to *Future of Human Resource Management*, "...a talent decision science is vitally needed today for all the well-known reasons that it is increasingly important to enhance talent decisions, including structures, behaviors, capability, learning, collaboration, shared culture, and so on." [187] This decision science, applied in different ways in many organizations, allows human resource professionals to deliberately map out corporate genetics by managing competencies. The CEO of Dell, in the book *Executive Intelligence*, talks about how the National Basketball Association Team, the Chicago Bulls used a talent decision science to win six championships in the 1990s. He likened the Chicago Bulls' ability to maintain championship caliber players over an 8 year period to Dell's continual efforts to manage a highly talented roster [workforce] of players to sustain a competitive advantage—as talented people push each other to excel. [188] The CEO of Dell, like the writers in *Future of Human Resource*

Management, see the value in talent management—to the point that it’s a decision science.

In the Army Research Institute for Behavioral and Social Science’s July 2004 report on *Competency Based Future Leadership Requirements*, the authors point out the critical need for a competency framework and its defined purposes for describing soldiers’ expectations and requirements. More importantly, a framework would “...help align training, development, and performance management processes and better communicate how leadership contributes to organizational success.” [189] The Army Institute demonstrates the direct link between the competency framework, or better put, talent management structure and the organization’s success. In the article, *Are you Managing Your Company’s Talent*, it reinforces the talent management structure and decision science, by describing how management is skewed towards workforce optimization, development and retention. [190] In setting up a talent structure, human resource professionals can deliberately manage the organizations talent pools, and directly link their efforts to achieving business objectives and goals.

The talent or competency management emphasis has been around for hundreds of years—yet not until the last 20 to 30 years has it become a critical indicator of business health and welfare. Why is this? In a June 2003 memorandum outlining Microsoft’s business plan, Steve Ballmer alluded to the fact that business markets, more particularly the technology market, is riddled with upstart companies who are on the leading edge of technology with minimal financial entrance barriers or costs. I can see how this puts big companies like Microsoft at a big disadvantage, so much so that keen interest and focus is

shifted to talent management as a competitive advantage. He went on to state, “We cannot afford to have anything but the best people at Microsoft.” [191] This Microsoft example shows that any company, no matter the size or financial stability, is not immune from not having the human talent necessary to achieve organizational goals and objectives. At this juncture, once businesses understand that talent management directly enhances and drives competitive advantage, do they invest time and energy into instituting a human resource or capital strategy—that ties into and completely supports the overall business strategy.

In October 2005, the GAO released a report highlighting the Navy’s Human Capital Strategy, announced in June 2004. When the Navy announced their human capital strategy, their leadership associated the need for a strategy with the facts that manpower costs were rising, the global military environment was changing, and mission requirements were evolving. In recognizing this, the Assistant Secretary of the Navy stated, “The overall goal of the strategy is to have the best people with the proper skills, training, and experience in the right jobs.” [192] Microsoft and the Navy both recognized the fact that talent enables an organization to succeed in their respective environments—not merely inking words to paper or briefing it in strategic forums. The article, *Does your Business need a People Strategy*, perfectly summarizes this concept by stating, “People strategies focus on the right combination and type of people and the level of performance required to succeed. Just as successful business strategies must be distinctive, people strategies too must focus on competitive people advantages relative to competitors.” [193]

“Any company that wants to capture a disproportionate share of profits from tomorrow’s markets must build the competencies that will make a disproportionate contribution to future customer value.” [194] This quote from *Competing for the Future* nicely frames the necessity of building competencies, and it’s the human resource professional’s responsibility to build the structure that allows this to happen. The Navy human resource personnel are doing just this with their Sea Warrior program, as they’re building sailors according to their competencies. In doing so, the Navy leadership understands that all sailors need to be profiled within a system—and not just in a performance evaluation. [195] As the world changes, and mission requirements evolve, the Navy will be able to more effectively identify sailors with key competencies to achieve mission objectives. IBM human resource personnel also recognize that competencies are the foundation of performance, as they’ve incorporated a skills and experience inventory to better understand their workforce genetics. IBM, in the article *Managing People like a Supply Chain*, further goes on to explain that managing skills in this fashion allows a clearer picture of the supply and demands factors associated with human capital and its investments. [196] At this point, the reader should be brooding over why the Air Force doesn’t have an institutional method to track competencies, knowledge, skills, experiences, etc...

Competency Strategy

While you’re still thinking about the Air Force question, here’s a passage from the article, *Does your Business need a People Strategy*: “A people strategy helps to direct the investment in talent and the programs to manage them. Companies without an articulated

strategy run the risk of developing programs that don't meet organizational needs to further the business.” [197] You can stop brooding now as you realize that even though some Air Force officer career fields have a semblance or some parts of a strategy, the Air Force as an institution does not have an overarching method or program to grow its officers—as force development falls woefully short of the mark. In *Managing People like a Supply Chain*, the article's author, David Essex points out that managing people as a supply chain provides the structure, granted human resource managers have a strategy for 2, 3, to 5 years out. [198] Wow, to the reader, this may sound like the intent of vectors in the Air Force Force Development Program, however I would caution that what David Essex talks about is a much more programmatic, deliberate way of strategizing about human capital. The heart of this article focuses on the fact that you track human capital or talent development as you would manufacturing, in that you gauge development and track competencies against desired goals and objectives. From what I read on this subject, I would venture to say that we should treat human resource management as its own program, on par with acquisition programs as will be pointed out in section 6.

As we get back on point...and discuss competency strategy, it's all about tracking the genetics of each employee against individual growth goals that tie into overall business or company human resource goals. Companies who have competency strategies have procedures to identify changes in their external and internal environment. They continuously examine their competitive environment for changes and diligently tie into business strategy discussions. According to the book, *Roadmap to Strategic HR*, this

allows the company and its human resource personnel to identify the workforce drivers that drive significant changes in workforce competencies. [199] In monitoring required competencies, human resources can more deliberately plan what type of competencies are required and which employees to strategically develop to meet the needs. The Office of Personnel Management (OPM) has a Five-step Workforce Planning Model that supports competency development within organizations. More importantly, their model links organizational strategy to competencies, skills, and gap analysis—to find out what skills the organization does not have, but requires to meet mission demands. And of greatest magnitude is that OPM's model supports an iterative process—one in which the organization is constantly assessing and redirecting efforts based upon the environment. [200] Most successful organizations, to prosper in a volatile world, have human resource strategies that tie into their business strategies and are iterative—allowing them to adjust competencies and skills without tearing apart and rebuilding their human resource departments.

In industry and some government sectors, competency development is a crucial part of competency strategy. The overall competency strategy looks at how the organization evaluates and uses competencies to achieve business results. Competency development explains how human resources along with leadership will build the competencies to achieve the strategy. For instance, the Navy is fielding their human resource program, Sea Warrior. As part of Sea Warrior, the Navy is using the Department of Labor's competency descriptors as part of the SkillsNet methodology to define job requirements based upon knowledge, skills and abilities. [201] This allows the Navy to definitively

identify the type of sailors by their competencies and underlying skills—in order to fill positions that require those competencies and skills. In the article, *Sea Warrior: Maximizing Human Capital*, Navy leadership further identifies what type of training, education, experience and certifications the sailors require before entering a job—so the sailors are prepared to perform in their future positions. [202] As the Navy transfers all its personnel to this system, their human resource professionals will base future assignments on competencies versus merely a occupational or rating badge. The Army uses a similar methodology in growing their leaders for future assignments in that they identify leadership competencies that become the roadmap for successful growth into future duties and responsibilities. [203] In studying both the Navy and Army, one prevailing commonality emerged and that's both services understand that documenting competencies and profiling their personnel are iterative processes and tedious practices. Both services assign myriad human resource personnel to consistently track personnel and update their records accordingly. In the *Portable MBA*, it acknowledges that as the environment changes rapidly, skills become obsolete—so businesses must continually provide training, education and other opportunities for their employees to develop new skills and gain new knowledge. [204] This is why the Navy and Army are so adamant about tracking their personnel's competencies.

Hewlett Packard spends approximately 200 million dollars each year in developing and providing courses for their employees. As part of the curriculum, leadership stresses both fundamental skills as well as technical skills—as employees must be subject to both types of training. [205] In providing these courses, Hewlett Packard enhances individual

careers as well as addressing bottom line performance enhancements for the company. As Michael Dell proclaims in his book, *Direct from Dell*, companies and employees must look at training and learning as a necessity and not a luxury. [206] As technology changes and business competition increases, employees and leadership must constantly learn to keep a competitive advantage in their respective markets. This is increasingly important in government as the prospect of how to measure the enemies' competencies is not as well defined as in business—so government employees must continuously strive to better themselves.

Once employees develop competencies and become skilled in their positions, companies provide training opportunities and mentoring so employees “refresh” their attributes regularly. As time progresses, companies change their goals, objectives, missions and upgrade technology. These changes may require new competencies and skills, so human resource professionals execute the human resource management plan based upon deliberate training, education and assignment opportunities. The leadership and human resource managers incorporate flexibility into their competency management programs to ensure that employees benefit from acquiring new competencies and skills when the environment demands they adjust their career paths. The following passage summarizes the dynamic manner in which companies stay abreast of market changes: “In developing strategies in today’s complex and dynamic business environment, there is a critical need for business leaders continually to assess their talent pool to determine if the appropriate expertise needed to accomplish the business strategies is available within the organization. [207] This continuous assessment coupled with the need to stay agile in

competency development allows leadership to adjust to external impacts on the organizations while maintaining focus on business objectives.

The Army does an exceptional job managing competencies in a volatile and rapidly changing environment. Within their force, the Army emphasizes competency management across individuals and jobs—as competencies provide foundations for skills, knowledge and abilities. [208] Companies like IBM institute the same competency management concept as they manage 335,000 active worldwide employees. Within IBM, leadership developed a standard nomenclature for skills, organizing a taxonomy of competencies that describes people by their job type. [209] In both the Army and IBM, competencies are managed for the benefit of the employee and the organization so leadership knows what skill set they have and the employees have a clear understanding of their current and future potential. In the book, *Fedex Delivers*, managers realize that competencies drive company success and give the business a competitive advantage. To Fedex leadership, competency management gives the business a firm grip on the employees' knowledge and skill base. What this does is enhance the business's ability to change or modify actions based upon external impacts and leadership direction. [210] With increasing operations tempo, the Navy plans to use the Sea Warrior program to manage competencies required by the positions and personnel. This way, the human resource detailers will match competent sailors to positions—ensuring unit readiness and mission success. [211] As depicted in the Army's, IBM's, FedEx's and the Navy's situation, competency management is integral to a human capital strategy—and one that enables competitive advantage.

The last part of talent management is competency tracking and reporting. Whether a multinational corporation, military unit or national business, leadership needs to know the make up of its employee population and what talents they possess. In the article *Supplying Labor to Meet Demand*, it explains how IBM launched their new human resource system. According to Patrice Knight, Vice President of Business Transformation, the new system "...catalogs skills, creating common descriptors around what people do, what their competencies are, what experiences and references they have, which goes beyond a basic job description..." [212] As companies, businesses, and government agencies enter new industries or adapt to new mission areas, leadership needs to know so they can re-assign employees to leverage the change or invest in education and training to upgrade employee competencies. What it does is give leadership data on their corporate genetics, their employee make up so they can analyze the situation and make decisions based upon factual data. In *Talent Force*, the authors write, "The real value comes when companies realize that talent measurement is one of the greatest business opportunities over the next decade and beyond. Why wouldn't a company want to use real data to improve in one of its most strategic areas?" [213] As the Air Force, and more specifically the communications career field undergo a manpower drawdown over the next 5 years, leadership must ask itself, do we know what talent and competencies we have within the career field? Do we know who we're going to let go or who's just going to quit? Do we know what competencies, skills and knowledge they're going to take with them? I don't believe we know, or even know where to start in identifying what competencies we have and which ones we require as a

career field. The next section will start to identify what the communications career field must do to identify what type of strategy it needs to continuously stay abreast of the talent or competency management question.

VI. The New Communications Officer Force Development Program

AFDD 1-1, *Leadership and Force Development* declares that “Developing Airmen best happens through a deliberate process, one that aims to produce the right capabilities.” [214] Now, this is the Air Force’s Leadership and Force Development Doctrine that states this among other passages that allude to systematically developing and growing Airmen to their highest potential. AFDD 1-1 further expounds by proclaiming, “Development processes and systems take individual capabilities and, through education, training, and experience, produce skilled, knowledgeable, and competent Airmen who can apply the best tools, techniques, and procedures to produce a required operational capability.” [215] Albeit just words, AFDD 1-1 is our Air Force’s doctrine on the subject—and specifically states, as I would view, in commander’s intent, what will be done to grow Airmen within the service. If I’ve done what I hoped to in sections 2 and 3, is to show the reader that the Air Force and more specifically the communications officer career field has not achieved the doctrine’s intent. The Air Force does not have an institutional, deliberate process other than the development team procedure that has proven not to work as written in AFPC’s development team handbook. The Air Force does not have an institutional process or system that tracks officers’ competencies, skills and experience—in order for assignment teams, DTs or CFMs to make deliberate, educated decisions on careers. Granted, there are some career fields, like Space and Acquisition that have components of a deliberate process, but as an institution, the Air Force does not have an overall human resource management plan for all career fields. And as evidenced in section 3, RAND, in their 2005 report documented

the communications officer career field deficiencies and pointed to the fact that force development is centered on tactical tasks—assigning officers to positions and not on operational or strategic initiatives to grow the career field and its officers.

In November 2003, the Air Force released its transformation flight plan and stated it would “...touch all aspects of the Air Force force management system.” [216] In an earlier section, it went on to state, “It addresses: accessions, promotions, education and training, evaluations and feedback, information/decision support tools, and the new Development Teams, which will be the lynch pin in the development process.” [217] Here the Air Force is, 2 and ½ years later, at the door step of a 50,000-plus person drawdown, and the Air Force still does not have a deliberate method to grow its officers, track their development, measure their progress, or measure their developmental impact on mission achievement and successes—or in some cases, failures. At the same juncture, civilian corporations, human resource consultant firms, Officer of Personnel Management, and the Department of the Navy have wrote extensively about, or have implemented human resource programs and systems that far-and-away put to shame our current T-ODP system, force development execution and from a “preview” briefing, the new FDTK. Why is it that we place such great emphasis and resources on initiatives such as fitness uniforms, new BDU uniforms, and new service dress uniforms—and ignore the greatest opportunity that leadership has to leave its mark—a force development program that prepares Airmen for the challenges of the future. In an October 2003 article titled AF Unveils Force Development Plan, General Jumper stated, “Force development is all about getting the right people in the right job at the right time

with the right skills to fight and win in support of our national security objectives, now and in the future. It will result in significant changes to our current program of officer progression.” [218] From my experience, force development has not significantly changed, minimally changed, or positively impacted officer progression. And, leadership has not implemented an institutional system to track or measure competencies or skills, so at the end of the day, leadership cannot manage or measure the “right people – right job” concept. Unless sweeping reform is enacted by Air Force leadership to break the paradigm and implement a hard-hitting, measurable force development program, something is going to break—especially as leadership draws down the officer corps. The GAO, in their March 2002 report on Strategic Human Capital Management, reinforced the opinion that federal agencies must have the best employees with appropriate competencies and skills to respond to crisis events, like September 11th. [219] If the Air Force is going to get there with a leaner officer corps, then leadership must get serious about officer force development.

According to the *FY2007 Air Force Posture Statement*, leadership has the opportunity to act aggressively in deliberately growing its officer force. In the document, it declares that the Air Force is going to continue to look for ways to improve development opportunities so the force can meet its commitments. [220] This same fact is seen on page 4 of the *2006 QDR*, where it “...updates the Department’s workforce management policies to guide investments in the force and improve the workforce’s ability to adapt to new challenges.” [221] Hopefully, unlike previous letters and memorandums, leadership acts upon these documents and holds senior Air Force officials accountable for

deliberately developing the force, and more specifically the officer corps. Officer force development is far too important, and is summed up in the book, *Talent Force*: “Having the right talent in the right place at the right time is a make-or-break factor for entities of all types and sizes—companies and nations alike.” [222]

The right talent in the right place is extremely important within the communications officer career field. According to the AFNetOps Transformation Briefing dated 28 March 2006, 59 percent of the communications officer career field is projected to be cut sometime between 2007 and 2011. [223] With no current career field strategy or management plan in place, and no methodical officer reduction plan to match the organizational transformation, communications leadership must act now and create a sense of urgency if the first cuts are going to happen in fiscal year 2007. The authors of *Competing for the Future*, Gary Hamel and C.K. Prahalad put the need for action in perspective as they wrote, “Urgency comes when everyone knows there is a brick wall out there, but that the wall is far enough away so there is still time to turn the wheel and avoid the crash. Top management’s responsibility is to make sure that wall always appears just a little bit closer than it really is.” [224] In many transformation briefings, the wall appears very close as fiscal year 2007 is 5 months away—and the career field has no systematic draw-down plan associated with the organizational transformation. Yes, I’ve seen the number cuts per unit, however the reductions are not accompanied by an overall methodology of what skills, abilities, knowledge and experiences are going to be cut—also to include what functions the career field will divest itself of during the drawdown. Now is the appropriate time for leadership to launch a plan; however, no

matter how comprehensive the details, it will not take into account proper mechanisms to deliberately cut the force because the officer career field has no career field strategy or management plan to guide these type actions.

What must be done to deliberately, yet expeditiously launch a communications officer drawdown plan? First, what you don't do is arbitrarily leave the draw down to a normal AFPC "cookie-cutter" approach to cuts via a "reduce-in-force" board—as it does not appropriately and deliberately address the critical issues of competencies and skills reduction versus AFPC's quota reduction process. If leadership is to draw down the communications officer force, than it's to be accomplished by senior communications officers with the knowledge and experience to adequately assess the career field's health and ability to accomplish mission objectives. Of course, this is not the place or time to go further, however senior communications leadership must instill a sense of urgency, along with the direction that any drawdown is to be calculated based upon facts.

The same sense of urgency that hopefully will be focused towards the impending draw down must also be directed to communications officer force development. The two efforts cannot be accomplished in isolation if both are to be successful as the transformation efforts will require keen human resource strategy and management initiatives. According to the GAO's March 2002 report on Strategic Human Resource Capital Management, the authors exclaim that an agency's most important asset is its people—and "As such, effective strategic human capital management approaches serve as the cornerstone of any serious change management initiative." [225] As senior leaders examine the draw down and really scrutinize communications officer force development,

they must set a vivid career field strategy, flexible career field management strategy and set thorough expectations of what's expected from each officer in realizing the program. *The Workforce Scorecard* explicitly underscores leadership's responsibility in connecting workforce management to business strategy and the need to apply appropriate structure in order to successfully execute mission objectives and change. [226]

For the communications officer career field, the initial structure exists in the *Warfighting Integration and Chief Information Officer FY2006 Strategic Plan*. In this document, it decrees that part of the overall vision is to develop adaptive, trained Airmen. And as part of the mission statement, it asserts that leadership will transform the career field "...to lead the Air Force to leverage information for competitive advantage." [227] Approximately 2 years earlier in a July 2004 Intercom article, Lieutenant General Hobbins, then the Senior Communicator, basically stated the same—referencing that "our sights on the horizon, anticipating the right skills mix..." [228] However, here we are today, at the beginning of a draw down similar to the early 1990's draw down, and the communications officer career field still does not have a career field strategy or management plan to facilitate the metamorphosis to a leaner, more agile force. What must happen is what's written in the GAO's March 2002 report that's referenced so often in this paper, and that is senior leadership must be committed to developing a career field strategy, accomplishing results of the strategy, and investing time and energy into human capital. And most of all, senior communications leadership must enforce the strategy, not only in words, but by actions and continuous reinforcement. [229] In the midst of a rapidly changing environment and transformation efforts, communications leadership can

no longer let the officer career field aimlessly wonder down the developmental path without a career field strategy, or without a career field management plan. As alluded to in *It's All Politics*, I can write an extraordinary paper outlining the needs of the communications officer career field; however, if this paper or the concepts within are not supported by senior leadership, the ideas will not stand the test of time—or in this case ever. [230]

Why does the communications officer career field need support in this endeavor? Because this idea, this endeavor will change the way the career field develops its officers. It will change the career field's mindset and actions from arbitrary nature, to deliberately growing communications officers. Some people won't like it and others will say it's far too resource intensive and time consuming to accomplish. Others will look at it and say—this is not rocket science, this is what we should have been doing all along. Either way, it's smart, it's practical, and it meets the intent of the Air Force Force Development Doctrine. And, from those personnel in the communications enlisted corps who've worked for me in the past, you've heard the term far too often, “we're in the business of growing communicators!” This will definitely put us in the business of growing communications officers—based on deliberate, evolving, and practical approaches grounded in human resource management principles.

To make this transition from an arbitrary force development process to one grounded in human resource principles, leaders at all levels will have to change their mindsets about officer development. According to the intent in Army Field Manual 22-100, chapter 2, the communications officer career field would adopt a “warrior ethos”, one

affirmed in being a professional, expeditionary communications officer—enabling warfighting capabilities anywhere, anytime. [231] The warrior ethos would be anchored in an extensive competency development structure that ensures all officers are deliberately developed, and “quick to the fight.” This mindset change facilitates a leaner, more agile communications officer corps, one more able to meet military objectives based upon enhanced force development initiatives. If enacted, communications officer force development would be in accord with the December 2003 GAO report on Key Principles for Effective Strategic Workforce Planning, directing considerable resources and efforts into transforming workforce planning. [232] This transition to deliberately developing officers and its subsequent efforts would increase career field efficiency, make it results-oriented, and provide more impact to the warfighter.

In the July 2004 Intercom magazine, the former Deputy of Warfighting Integration, Mr. Rob Thomas discussed the need to change the manner in which the career field develops skills for meeting future missions. He directly linked this to the Air Force’s vision of transforming and maximizing mission capabilities—prompting a need for a different mindset of change. [233] This is the same mindset change I wrote about in the previous paragraph—managing officers’ skills and competencies to meet evolving and future mission needs. According to the article, HR as a Strategic Partner, it’s management’s responsibility to address the transformation needs and how the workforce will be structured to influence change. [234] Ironically, the book, *Strategy—Create and Implement the Best Strategy for Your Business*, alludes to the fact that people are the most important part of change, and the focusing of the transformation effort is often

management's greatest challenge. [235] With the inherent challenges wrought in change and transformation, along with the difficult and unrealized task of deliberately developing communications officers, it's evident that senior leadership needs structure and control of its officer development—in the form of a real program on par with acquisition programs.

According to a 2005 RAND report on Officer Career Fields, assignment teams and career field management activities concentrate on day-to-day, tactical activities of assigning officers to positions. They go on to say that these tasks leave little time for those personnel to look at operational issues concerned with career field health. [236] This is the precise reason why communications leadership must treat the officer career field development as a program, as important as a weapon system program—outlining cost, schedule, and performance objectives. Only then will those charged with managing the career field developmental efforts be held accountable for strategy, planning, managing, and producing quantifiable results. As will be demonstrated later in this section, it's paramount to have a career field strategy and execution plan as stated in a briefing by Edward Lawler, University of Southern California. His briefing outlined three key products that I believe should be in a communications officer career field program: 1) staffing, training and education management, 2) HR structure, processes and systems, and 3) business strategy based upon human resources. [237] These three products form the foundation of a career field program and provide it with structure and continuity.

A human resource program needs a foundation to support its functions and deliver development results. The program requires a successful strategy—and for the

communications officer career field, it will be the communications career field strategy. This document will outline the overall, iterative approach to career field strategy—with a subordinate career field management plan that roles in the programmatic function. The December 2003 GAO Report on Effective Strategic Workforce Planning, reinforces the programmatic structure by addressing five key principles that make up a program and its functions. [238] Most importantly, the principles hit upon the need to involve top management, identify key competencies, develop strategies that remedy gaps, implement processes to handle HR duties, and monitor and evaluate progress. As compared to my experience in a System Program Office, these five duties and the foundational products comprise the recipe for an efficient, healthy program. In reading the 2005 RAND report on Officer Career Field Management, all career fields require their own, in-depth force development structure—as one size does not fit all. [239] What this tells me is that each career field requires Air Force senior leader guidance, yet operational and tactical implementation should happen within the career field. This substantiates the need for making communications officer force development a program—reportable to senior communications leaders on a repeatable basis.

Even though the Air Force Force Development Program has not evolved as stated in the myriad briefings, articles and sight pictures, it has merit in its concept. The same holds true for DoD's efforts in creating the Space cadre as mandated by the 2001 Space Commission. According to the September 2005 GAO report on Defense Space Activities, DoD developed a space human capital strategy that established structure for a Space cadre. The Space cadre structure includes goals and objectives for integrating

space personnel across the four services. [240] Furthermore, the goals and objectives form the basis for tasks, calling for streamlined education and training, personnel management, and critical position identification. As the Air Force implements their tasks related to the overall DoD efforts, they've profiled all Space officers according to their competencies, experience and skill levels—including education and training; according to a fellow AFIT student and former Air Force Force Development Program member. As you can infer, the Space cadre initiative comprises the key tenets of the Air Force Force Development Program and outlines the blueprint to get the communications officer career field to a strategy-based force development program.

The Communications Officer Force Development Program consists of three levels: strategic, operational and tactical. Without all three levels, you do not have a force development program as referenced by the 2005 RAND report on Officer Career Fields. In the report, it outlines the need to have a high-level career field strategy, an operational-level force management that provides the policy framework, and a tactical-level management that carries out personnel functions. [241] As alluded to in section 3 and earlier in this section, the communications career field is more focused on the tactical-level tasks of assigning officers to positions versus aforementioned responsibilities at the strategic and operational levels. The topics of strategic, operational and tactical levels lead into the theme of this section, which is to outline a career field program that includes a career field management structure, career field strategy, career field management plan, career field training and certification, officer development, and information technology

support. The attributes of the career field program are critical to program success and permeate the strategic, operational and tactical levels of the program.

Career Field Management

In the article, *Aligning HR Strategy with Business Strategy*, the author writes “In a global context, it is essential to have overall principles and guidelines on which HR planning can be based and decisions made.” [242] Some entity or management-level person or office will be in charge of the overall principles or guidelines and answer directly to a senior leader. In the communications officer career field, it is the CFM who advises the senior leaders on the health and progress of the officer career field.

According to the Corning example in the *Driving Strategic Success through Human Capital Planning* article, the CFM should develop the human capital planning guidelines, process, and tools necessary to successfully manage the communications career field.

[243] The article further stipulates that the CFM, to be effective, must tie the human resource strategy to the business strategy. In doing so, it enables the communications career field and its leaders to tie officer growth to communications strategy—focusing individuals on mission objectives and future challenges. In the book, *Strategy—Create and Implement the Best Strategy for Your Business*, David Collis calls this “enabling structures”, which “...are the activities and programs that underpin successful implementation and are a critical part of the overall plan.” [244] Therefore, the communications officer career field needs career field management, one comprised of a structure of activities and programs, and an senior officer to manage those components.

In AFDD 1-1, the doctrine focuses on four elements of the force development process: force development definition, renewal, development, and sustainment. It further states that these four elements, supported by proper planning, will produce a capable workforce. [245] An institutional, well-documented force development process or better yet, program is what the communications officer career field is lacking. Currently, the career field has bits-and-pieces of a program, but not a structured, measurable program that deliberately grows its officers. Similarly, the GAO in an August 2004 report on Space's Human Capital Strategy, proclaimed that the Air Force must centralize its Space Cadre management to provide critical leadership in order to build the framework for the program and subsequently meet its goals and objectives. [246] In discovering that there are parallels between what the Space community has been mandated to do and what the communications needs to do—and the reader must ask why, with the communications diversity and mission criticality, its leadership hasn't mandated an officer career field force development program—comprised of the four elements mentioned in AFDD 1-1. According to RAND in its 2005 report on Officer Career Fields, the report points out that the communications officer career field assignment team is very competent at that tactical-level management of assigning officers to positions. However, the career field lacks the longer-term focus on officer career planning and overall management of the career field. [247] In order to remedy this situation, the communications leadership must focus more on the strategic and operational-level activities of managing the officer career field—providing guidance and direction on structure, strategy, and career field management. According to the book, *Future of Human Resource Management*, if

leadership mandates structure, strategy and career field management, leaders and managers at all levels will come to “grips” with officer development, connecting it to strategy and giving it the appropriate emphasis equal to more institutionalized programs such as budgeting and weapon systems acquisition. [248]

Implementing structure takes leadership, responsibility, and authority—those attributes wrapped up in what the civilian sector calls governance. To have governance, the most important thing leadership must do is assign people and resources to career field management efforts. In the article, *Driving Strategic Success through Human Capital Planning*, one of Corning’s lessons learned in implementing a human capital program was for leadership to dedicate internal resources to the task of developing an employee program—as not to rely on external consultants for something the organization can do more efficiently on its own. [249] Accordingly, the communications leadership must allocate dedicated, fully-focused resources on the career field management program, and then mandate structure and direction so all organization levels has explicit guidance on what actions they’re accountable for in executing career field management. As I go further, I’ll provide a notional structure, governance and responsibilities drafted for the communications officer career field. But for now, it’s crucial to know that organizational governance is leveraged by leadership support. The notorious March 2002 GAO report on *Strategic Human Capital Management* focused on leadership as it stated “...a key factor in the success of any specific strategic human capital initiative is the sustained attention of senior leaders and managers at all levels of the agency to valuing and investing in their employees.” [250] As depicted by the GAO, leadership, especially the

communications career field leadership must dedicate resources, direction, guidance and most importantly attention—the kind that turns heads and tells all subordinate levels that this is the most important item on the agenda, one that warrants unwavering support.

In the previous paragraph, I discussed leadership, authority, responsibility and governance as enablers to career field structure. These attributes define delegation of authority to fulfill a task or management function—the function of career field management. In this unique position, the person and people dutifully executing the career field management tasks are charged with representing leadership’s force development vision and program as well as advocating for the officers’ responsibilities to develop—in order for the organization to be successful and flourish. In the article, *Aligning HR Strategy with Business Strategy*, it asserts that human resource management or in the communications career field, the CFM must “strike a careful and well-constructed balance” between serving both leadership and officers—and that in service to both, the career field strategies are aligned with Air Force and communications strategies. [251] Striking a well-balanced approach through a deliberately-formed career field strategy is the responsibility of the CFM. And, the CFM does this by having a team of professionals at all levels, constructing a well documented strategy and plan, and through the authority and governance from senior leadership. Jack Welch, in his book, *Winning* speaks about facilitating this construct by stating “Elevate HR to a position of power and primacy in the organization, and make sure HR people have the special qualities to help managers build leaders and careers.” [252] The communications leadership need to take a lesson from Mr. Welch and assign the right people, with the level of rank necessary to

enact an officer career field management program. Equally important and critical to this endeavor, is for communications leadership to drive officer career field management direction down to all levels of Air Force and DoD units—to make sure the governance and program direction permeates all levels where communications officers work.

As I studied myriad GAO and RAND reports, the most intuitive aspect of their writings is that they provide the “recipes for success” to those organizations they research. It’s truly amazing the level of detail the GAO and RAND provide in not only identifying shortfalls, but in assisting the organizations with implementing long-lasting solutions to their respective problems. Most notable is from the 2005 RAND report on Officer Career Fields where RAND outlines the responsibilities of career field management, in particular the CFM. In this report, RAND writes about four elements of how to do the career field management job. It’s basically the blueprint for career field management structure: 1) make the CFM a senior-level, full time position, 2) provide the CFM with a staff and analytical support, 3) put the CFM at the Air Staff level, and 4) provide the assignment teams, DTs, and I would say, the training teams, with clear operational- and strategic-level guidance for making career decisions and assignment choices. [253] I would even go a step further and state that the Air Force Chief of Staff coordinate with MAJCOM, DoD and Joint Staff leaders to make it common practice that the Air Force’s senior leader have authority to mandate force development governance down through all DoD organizational structures—and that the governance is followed to the letter and intent. However naïve you may think I am by stating this dictum, I believe this is the only true way to govern a career field across DoD organizational boundaries.

We do it for performance reports, promotion recommendations, why not for career field governance. However much I digress on the governance piece, it's equally important to review the make up or genetics of the career field management team and its inherent responsibilities in executing the career field force development program.

The career field management team has the reins of the organization and its people. According to the article, *Measuring Human Resource Management's Effectiveness in Improving Performance*, its stated "HR's role in building a competitive organization include management of strategic human resources, management of transformation and change, management of the firm infrastructure [processes], and management of employee contribution." [254] The four attributes or functions are critical in the overall communications career field management program as they provide tangible focus to all personnel involved in the program. Equally as important, and to some extent more critical is the qualifications of those individuals charged with administering the career field management plan. According to RAND, the career field management team should have substantive knowledge of the career field and possess human resource management skills—most notably in the area of managing a dynamic personnel process and system. RAND further proclaims that the latter, human resource management skills are generally missing from career field management. [255] I surmise this is the problem with the tactical-level focus, disconnects between strategy and human resource planning, and the overall lack of career field management structure. Consistent with what's written in the book, *Human Resource Champions*, human resource professionals are charged with making the business's strategy happen through effective human resource practices. [256]

Any human resource unit, to include a career field management structure or manager will outline a plan to use human resources to accomplish organization objectives. In doing so, the career field management team must possess the skills to make it happen, assume the responsibility to make it happen, and be given the authority to mandate the program. This is where senior-level communications officers provide their influence and direction for the career field force development program and subsequent management plan.

Nothing will get done, no changes in career field philosophy, no strategy development, no deliberate career paths created, and certainly no competency tracking and measurements without the steadfast support and enforcement by senior communications leaders. And, this support and enforcement has to be more than catch-phrases in briefings, force development words in sight pictures, or the favorite “people are our most important assets” comments in interviews. Senior communications leaders need to hold its personnel in charge of force development accountable for progress, for program development, for human resource strategy, for measurements and analysis and for career field tracking and forecasting. In the same light, senior leaders must emphasize career field force development and its program by giving it a seat at the “table” along with those senior officers and civilians who set strategy for equipment procurement, weapon systems acquisition and budgeting...to name a few. The *HR Value Proposition* book touts this very theme as “...it is imperative that HR professionals be at the table. This requires more than simple familiarity with HR issues or internal operations; it requires knowledge about the driving forces that shape the fundamental nature of business.” [257] Consequently, the communications officer CFM must be immersed in

strategic planning forums so they can intelligently link human resource decisions to the organization's strategy—in this case officer development to transformational communications strategy.

The GAO, in its December 2003 report on Effective Strategic Workforce Planning, unequivocally cites that "...efforts that address key organizational issues, like strategic workforce planning, are most likely to succeed if, at their outset, agencies' top program and human capital leaders set the overall direction, pace, tone, and goals..." [258] In reviewing the new Air Staff organization, Secretary of the Air Force for Warfighting Integration and Chief Information Officer organization, I see the seeds of the communications career field future being planted—and an opportunity to foster officer career field development. Consistent with an article in the February 2005 Intercom magazine, the new organizational alignment provides governance and focus on officer developmental needs at all levels. [259] Now, leadership has an opportunity to make officer career field management a strategic focus within the Air Force—allowing senior communicators to deliberately grow officers to meet future requirements. The book, the *Talent Force* stressed this strategic focus: "When talent is established as a strategic imperative for the business, it becomes much easier for the head of talent to achieve this kind of business alignment. If talent is a priority for the business, senior leaders will make it a priority to communicate their talent objectives." [260] The first imperative is to set objectives for the communications officer career field management team, by stating which entity or position is responsible for what aspect of the career field management program. As mentioned earlier, the reader should understand that senior leaders facilitate

and direct career field management. The following paragraphs will introduce the reader to other critical positions within the career field program and briefly discuss their notional or potential roles.

The communications officer CFM is a Colonel, stationed at the Pentagon, working directly for the senior communications leader. The CFM is the Communications Officer Force Development Program Manager. As the program manager, the CFM is directly charged with career field strategy development, forecasting career field manpower numbers, measurements and analysis, development and coordination of the career field management plan, and manages the actions of the Communications Officer Force Development Team. In a related capacity, the CFM oversees and directly impacts the assignment actions, signs off on vectors and feedback, approves educational and development tours, reviews and approves authorizations and requirements, tracks officer progression, facilitates officer rankings, and supervises the career field training and certification program. Realizing the aforementioned tasks are far too many for one person to handle, the CFM has a centralized, yet right-sized staff to manage the many facets of the officer career field program. The CFM and staff review the DT's allocation of field grade officers and senior captains to positions based upon officer rankings and priority position allocations. Similarly, the CFM and staff work closely with the assignment team to allocate junior and mid-level captains to positions. This includes assigning them to developmental education and tours based upon merit. Additionally, the CFM is accountable to the senior communications leaders for quarterly program management reviews and sits on many strategic transformation groups. To accomplish

all career field objectives, the CFM and staff work closely with decentralized agencies and organizations to accomplish tasks related to training, assignments and career field assessments.

The communications officer Development Team (DT) answers to the CFM on matters relating to officer career field development and management. The DT meets quarterly at a predetermined location for a week to 2 weeks, based on a set agenda instituted by the CFM and approved by the senior communicator. The CFM chairs the DT as the DT consists of MAJCOM-designated colonels, rotating unified command colonels, and a Colonel from SAF/XC plans, and AFCA. To fulfill its strategic mission, the DT reviews career field strategy, reviews the career field management plan, and reviews the officer competency model for relevancy to the career fields focus, vision and external environment. To fulfill its operational mission, the DT reviews field grade officer and senior-level captain records, ranks officers according to year group, chooses officers for developmental tours and educational opportunities, and provides officers feedback and vectors based upon their combined decisions. The DT also reviews the overall compilation of position authorizations and requirements for DoD-wide Air Force communications officers. As part of their tactical responsibility, the DT members choose officers for command and also assign the field grade officers and senior captains to priority positions (A, B, C) based upon their year-group rankings. Finally, leadership inside and outside the communications career field must understand that properly developing, managing, and executing a human resource program as big as the communications program takes resources and time. Senior leadership and the CFM must

constantly brief Air Force and DoD leadership on the benefits gained from holding four DTs annually—as the time and resources expended pay great dividends.

The AFCA Communications Officer Training Branch serves as the career field management program's training and certification office. In this capacity, the training branch controls all communications officer training records via an information technology system. The training branch controls training reports, allocates training based upon actual requirements, control mandatory training quotas, and keeps training measurements and analysis reports on the career field. Additionally, AFCA Training Branch controls the U&TW, CFETP development and modifications, course curriculum development, and serves as the career field's point of contact to the AFOMS. AFCA sets all certification processes as well as requirements. They field an electronic training catalog, facilitate the creation of new courses, modify or cancel existing courses, coordinate with the AFIADL on e-learning initiatives, coordinate with DAU on acquisition-based courses, coordinate with other government agencies on training courses, and procure Air Force-wide contractor training to fill any training gaps uncovered through extensive training assessments.

The communications officers' FAMs are located at MAJCOMs, Warfighting Headquarters, Agencies, Unified Commands and in DoD organizations where a senior leader is warranted to manage officer developmental activities. Upon assessment or request, the CFM and agencies work out the details on whether a FAM is required. The FAMs serve in the rank of Lieutenant Colonel or above due to the magnitude of experience required to adequately manage the communications officers' careers within

their purview. In this capacity, the FAMs manage their command communications officer positions, update job descriptions and requirements in the information technology system, modify competencies and profiles of both the positions as well as the officers within the positions, validate training requirements with AFCA, and provide vacancy requests to AFPC. On an annual basis or as needed, the FAMs validate communications officer positions and provide feedback to both AFPC and the CFM. To fulfill its duties associated with developing communications officers, the FAMs review their officers' profiles on an annual or as needed basis and provide the officers and their supervisors' feedback on modifications as well as focus areas. Finally, the FAMs provide feedback and oversight to supervisors on officer progression and developmental activities.

The AFPC Communications Officer Assignment Team concentrates on the tactical execution of officer assignments to positions. Its primary duty is to manage the authorizations and requirements in conjunction with FAMs and the CFM. It updates and modifies the position descriptions in the AMS and deconflicts any issues with the CFM—as the CFM's staff is in charge of overall oversight of the position descriptions and competencies. Additionally, the assignment team loads field grade officer and captain assignment matches in the AMS at the direction of the CFM. If there are any conflicts, the CFM and senior leadership deconflict officer job assignments. The assignment team matches all lieutenants to their respective positions and loads their vectors and feedback into the system. The final assignment team responsibility is to load vectors and feedback into the information technology system on all field grade officers and captains—at the

request of the CFM and staff. The CFM and staff forward the information to the assignment team staff.

The 333 TRS concentrates on developing, managing and teaching communications officer courses aligned with the career field training and certification program run by AFCA. The squadron leadership sits on the U&TW and provides feedback on student performance and perception of impact of the courses. Upon request from AFCA and the U&TW, the 333 TRS researches both industry and government for ideas on how to institute the latest training techniques. If necessary upon the request of AFCA, the 333 TRS, manpower permitting, can assist in certification processes.

The AFOMS develops, administers, and compiles occupational surveys to validate competencies and skills of communications officers. Before addressing the survey, the AFOMS representative works with AFCA on the target interview population and coordinates with FAMs. Upon completion of the survey, AFOMS briefs the U&TW on the outcomes and provides supporting documentation.

Unit leadership is instrumental in executing the communications officer career field management plan. Unit-level leaders are charged with mentoring the officers, setting up developmental plans based upon position descriptions, experience level, competency and skill requirements, and certifications. As part of execution, leaders sign off on training, upgrades, ODP and assignment recommendations and certify their officers according to the certification requirements. Unit leaders also assign officers to deployments, conduct record reviews, update position descriptions with FAMs, and provide a leadership foundation for the officer to grow and develop.

The communication officer is the reason there's a career field management program and associated plan. As such, the officer initiates growth opportunities, focuses on training and certification, concentrates on their current position, and immerses in a reading program based upon Air Force and career field readings. Finally, the communication officer holds their superiors accountable for their responsibility in the development process.

The nine areas above are critical and work in lock-step to develop, manage, and execute the career field management plan. Nothing in the structure is complicated, however without senior leader governance, a career field management strategy and plan will never happen—as we'll find ourselves back in the current situation where we have to hire a consultant to tell us what we already know...that our career field is broke. The career field and its leadership must realize that we can build our own career field strategy, career field management plan, training program, metrics and information technology—granted leadership takes the time to allocate resources and focus on the pertinent topics. The rest of section 6 touches upon how to build a career field program—and its components.

The Communications Officer Career Field Force Development Program consists of a career field strategy, career field management plan, career field training and certification process, officer growth strategy, measurements and analysis, and information technology applications. Over the next 50 or more pages, I'll describe the key components of the program and give you insight into what needs to happen, culture wise to get the program

off the ground. The first integral part of the career field force development program is the Communications Officer Career Field Strategy.

Communications Officers' Career Field Strategy

The communications officer career field needs the ability to examine its internal and external environment and tie human resource decisions to its core mission capabilities that support the Air Force's mission. Currently, communications staffs do an adequate job assessing future needs based on the budgeting process and other mechanisms charged with detailing future initiatives. And as seen in today's environment on the Air Staff, when we cannot conduct assessments on our own, leadership pays for consultants to come in and pave a future transformational plan—at the tax payers expense. However, that's not my intent to quibble about whose responsibility it is to plan future states and initiatives. A more critical issue at this juncture in time is the method in which we do, or in this case, do not align human resource practices to required capabilities, which in turn support mission accomplishments. In the March 2002 GAO report on Strategic Human Capital Management, the GAO wrote that “The effective pursuit of organizational alignment and strategic human capital management requires the integration of human capital approaches with strategies for accomplishing organizational missions and program goals.” [261] This pushes to the forefront the need to survey and analyze the communications environment and future Air Force needs to see where best to posture our career field officers. Only then can leaders align officer competencies that enable the communications capabilities. The GAO further goes on to attest “This new strategic approach, or redirected focus of the human capital function, centers on the contributions

that it can make to the long-term accomplishments of the agency's mission. [262]

Likewise, another report, this one fielded by RAND in 2005, discussed the same strategic reference as related to Joint Officer Management. In the report, RAND points out that the DoD personnel who manage joint service officers must define workforce characteristics that will be needed in the future. RAND goes on to say that joint military leadership needs to align joint officer competencies with future initiatives to ensure that assigned officer are qualified to meet demanding joint requirements. And finally, RAND recommends joint leadership develop strategies that address long-term human resource management issues dealing with resolving skills gaps. [263]

As demonstrated again by the GAO and RAND, there's a need to implement a strategy that identifies mission requirements and then evaluates the human resources available to meet the requirements. The book, *Strategic Staffing Guidebook*, outlines the need to have a strategic staffing model, one that determines future requirements, assesses current and future human resource needs, identify competency and skills gaps, implement staffing plans to remedy the situation, and institute a measurement scheme to gauge results. [264] At present, some leaders are skeptics and may look at this as extraneous workload. Those leaders examine past performance and say they've been successful without a grand strategy to assess the environment as well as human resource management. Nevertheless, these leaders must take heed of what the book, *Future of Human Resource Management* states, "Past achievements don't guarantee future success. Companies must regularly take the pulse of their organization to make sure they have a

clear sense of who they are, what they stand for, and what behaviors their people must exhibit for the enterprise to be successful.” [265]

In the past, the Air Force and the communications career field has been very successful in producing capable leaders. However, according to AFDD 1-1, “...the evolution of technology and world political events demands a leadership development approach that keeps pace. The Air Force requires a simple, understandable, deliberate development system for the warfighter.” [266] This system, process, or strategy needs to identify future mission requirements, competencies and skills, and be grounded in doctrine and driven by policies. These are the same facets that RAND recommended to the Joint Officer Management office after conducting studies into the development of joint officers. [267] And, based off RAND, GAO and AFDD 1-1, and their recommendations, I believe the communications officer career field needs to adopt the same line of thinking and implement their career field strategy as will be explained...right now. The Communications Career Field Strategy is depicted in

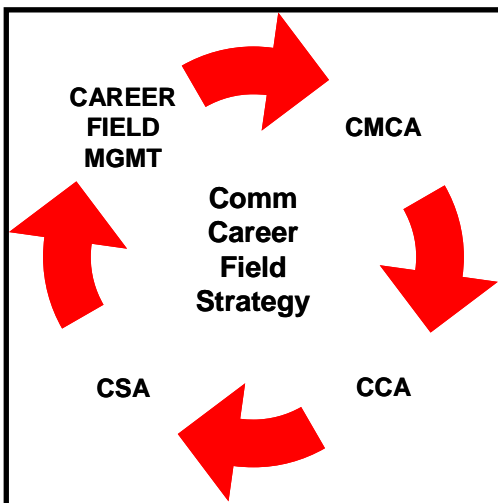


Figure 13. Career Field Strategy

figure 13.

The Communications Mission Capability Analysis (CMCA) is a full analysis of the Air Force’s and DoD’s current and future mission areas. This analysis is accomplished at least annually and done more often if directed by the senior communications leadership. In doing it at

least annually, leadership will ensure the career field does not get complacent as has been the case over the last couple years. In becoming complacent, the career field has not examined the environment for future capabilities or mission areas—causing leadership to outsource to Gartner Group, the endeavor of charting future mission requirements and aligning the career field accordingly. This complacency is explained in the book, *Future to Human Resource Management*, as it stated:

It is essential for HR leaders to accurately anticipate the future and how such changes may affect their accountability. Without the capacity to recognize and accurately plan for changes in the business landscape, coping strategies cannot be proactive—they can only be reactive—and at a much higher cost. [268]

With the new communications officer career field construct, the CFM is given more responsibility to work with planners on charting the career field future based off of emerging mission needs.

In conducting the CMCA, the CFM along with planners and select communications officers will study briefings, charts, concept of operations, joint operation plans and a multitude of other documents in assessing the environment and indicators of future mission areas. Most of this work is accomplished by the planners at all levels and documented in repositories of some sort. What's critical is that the team charged with mapping out the environment must interview or talk with those closest to strategy development in order to capture the tacit knowledge that accompanies strategic discussions. Once the team captures the attributes of the environment, then the team must scrutinize the communications arena to see what capabilities enable or support the environmental attributes—in order to achieve mission success. It's my experience

through this paper, that evaluating capabilities is an “art” and not a “science”. However, if the team or individuals can map the capabilities to accomplishing the mission without uncovering gaps, then the team has communications mission capabilities. The last step is for the CFM to discuss and evaluate the mission capabilities with the development team and other influential senior communicators. Once this is done, then the CFM can continue on to identify or validate communications competencies.

The Communications Competency Analysis (CCA) is a full analysis of the competencies required at both the tactical and operational level to enable the capabilities identified in the CMCA. According to a December 2003 GAO report on Effective Strategic Workforce Planning, “It is essential that agencies determine the skills and competencies that are crucial to successfully achieving their mission and goals.” [269] After the initial planning takes place to establish the core competencies at both levels, then annual evaluations are required to validate the competencies, and its internal makeup to include knowledge, skills, abilities, education, training, certification, experience level, and potential development tours. In doing so, the CFM’s staff leads this effort with the FAMs and AFCA in support. This process is explained quite well in the *Roadmap to Strategic HR*, where the team analyzes the competencies to see if any changes to their makeup need to happen. For instance, if the team was analyzing a competency and members thought additional training was required, then they’d add the requirement to the competency. [270] This holds true for knowledge, skills, abilities, experience, education, training, certification and potential development tours. This analysis is very fluid so the team will find a multitude of ways to analyze the competencies to decide whether to

modify the internal make up or leave it the same. Finally, the team will discuss any changes, if necessary and what must be briefed to senior leadership.

The Communications Solutions Analysis (CSA) is the “gap” analysis where the team analyzes whether the current career field officers have the competencies to enable the communications mission capabilities. In the December 2003 report on Workforce Planning, the GAO cited a process very similar to the CSA as the approach to use when attempting to estimate the number of employees needed with specific competencies and skills. [271] The initial step in this analysis is a monumental task that should be accomplished with the communications mission capability analysis—and that’s the baselining of all communications officer positions within DoD. I’ll go deeper into this task as part of the career field management plan; however this is critical to understanding the type of communications officer jobs that are within DoD, their respective position descriptions, and required experience levels per competencies. The position description will allow leadership to categorize the job according to which capabilities it enables as well as its required competencies, skills, knowledge, etc. The next step is to take the positions and corresponding capabilities and map out the number of officers required for each capability. This takes into account downward-directed or new capabilities that must be addresses in the solution analysis. What happens here is that the competencies are connected to the capabilities—allowing the team to make an estimated forecast of the number of officers required according to the capability analysis. At this point, a thorough officer profile inventory is conducted to find out how many officers possess the “certified” competencies to serve in the categorized positions. Finally, the team

compares the capability requirements as related to positions against the officer profiles to identify any gaps in competency coverage. This process takes time and dedication though when set up and running on a continuous basis, the process will flow allowing the Air Force to automate the process as the Navy is doing within their Sea Warrior program.

The CCA and CSA, as part of the communications career field strategy, provide the quintessential competencies that are missing from the communications career field management plan today. The competencies form the foundation for the career field pyramid, also referred to in the civilian world as a competency growth model—providing communications officers with a developmental model that provides the “developmental” blueprint. The *Workforce Scorecard* exclaims “Competency growth models for strategic positions gauge employee growth and contribute to the firm’s competitive advantage.”

[272] Here, the book portrays the link between competent employees and capabilities—where the skilled employees achieve the mission through enabling the capabilities. The book also goes on to say that in most sectors, employee growth and development is usually random, left to chance whereas with a competency growth model, development is more deliberate and focused on the firm’s capabilities. This is why HR must devote time and resources toward developing and managing a competency growth model. [273]

The communications officer career field pyramid is grounded by the assumption that all communications officer gain a foundation of communications knowledge at the expeditionary communications officer training, upon entry into the Air Force. If you look at figure 14, you’ll see that the pyramid rests upon the communications officer’s entry-level knowledge, as well as any other foundational communications courses the

officer may have taken in his or her undergraduate programs.

Career Pyramid

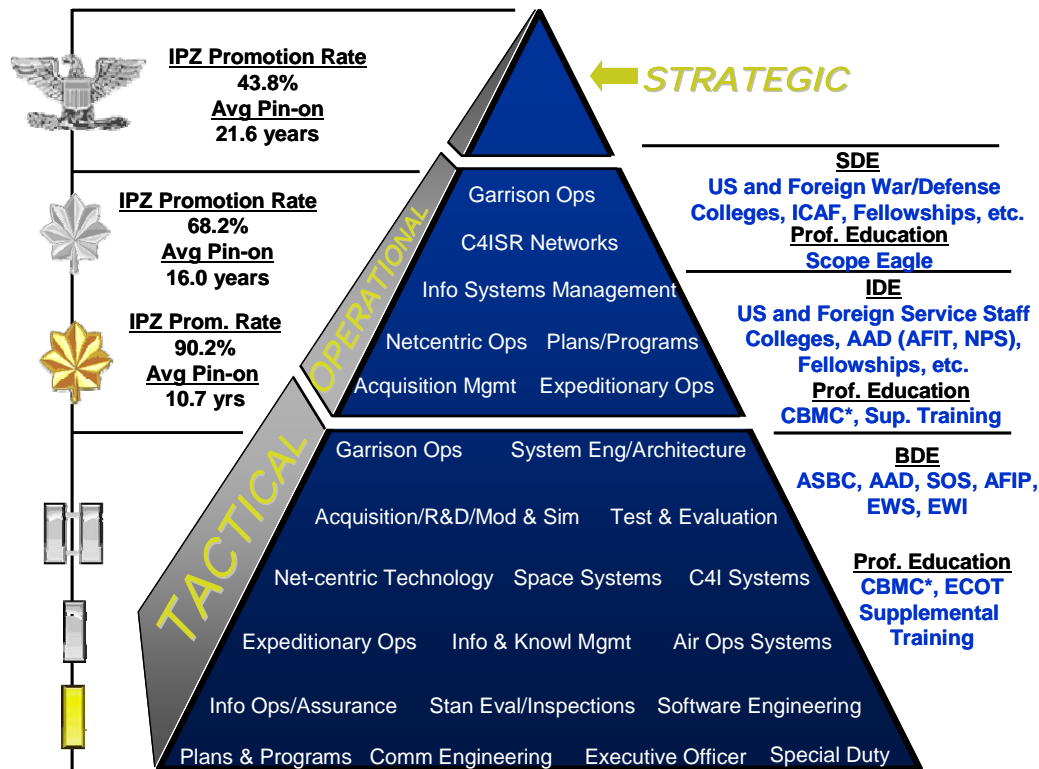


Figure 14. New Career Field Pyramid

Along the left-hand side of the pyramid, you'll see a typical rank structure with Air Force promotion rates, taken from the current career field pyramid. On the right-hand side, you'll see a listing of professional military or career field schools that directly correlate to the ranks on the left. These schools represent a medley of opportunities for the communications officer to act upon when developing according to guidance in the new career field management plan. As you can see in figure 14, the pyramid is divided into three levels, the strategic, operational, and tactical, again modeled after the current career

field pyramid. This is where the similarities end as the old pyramid based development on agency and hierarchical advancements. The new career field pyramid bases officer growth and development on the acquisition of competencies. As officers grow and get promoted to higher ranks, they should acquire more competencies—going deeper at the tactical level and broadening at the operational level. And then, by the time they achieve the rank of colonel, the officers should have acquired many competencies across the broad spectrum in order to make themselves a strategic-level leader—armed with the knowledge, skills and abilities to set policy and lead large organizations. In the tactical and operational levels, the competencies are made up of knowledge, skills, abilities, experience, education, training, certification and potential development tours. The aforementioned attributes make up a competency and several make up an officer's profile—as it tracks the officer's overall competency level in the communications career field.

The tactical-level communications officers are lieutenants and captains, charged with learning their primary craft. According to the Air Force Officer Force Development Briefing, these officers, company grade officers, serve as specialists in their respective competencies while learning about their leadership responsibilities. [274] In AFDD 1-1, their fundamental tasks are to build core values, skill competence, expeditionary expertise, and understanding of the Air Force and joint world. [275] These officers spend their time in training, developing their skills as well as in offices and agencies nurturing their leadership fundamentals. Their responsibility is to gain as much experience in their

primary craft, gain exposure to operations and increase their understanding of the communications business.

The operational-level communications officers are majors and lieutenant colonels, charged with broadening their perspective in their primary craft. According to the Air Force Officer Force Development Briefing, these officers, field grade officers, broaden their scope in order to integrate multiple competencies in accomplishing mission capabilities. In this capacity, these officers understand how to use personnel to achieve mission success and possess an understanding, knowledge and skills to lead complex teams toward task accomplishment. [276] In AFDD 1-1, their fundamental tasks are to hone their situational awareness, integrate expertise into air and space operations, fine tune joint and Air Force knowledge, and expand mentoring opportunities. [277] These officers spend time as commanders, division chiefs and team leads, molding and developing junior officers.

The strategic-level communications officers are Colonels and Generals, charged with providing organizational direction in the midst of changing and uncertain times. These officers possess a deep understanding of AF and joint missions and spend a majority of their time setting policy, providing guidance and maneuvering the force. According to AFDD 1-1, their fundamental tasks are to leverage their experience to further the force as well as leverage time to lead junior, less-experienced officers in growing their experience base. [278] These officers spend time as group and wing commanders, directorate chiefs, and agency chiefs, leading the charge to develop vision and set goals for the broader Air Force to follow. In the Army Field Manual 22-100, chapter 7, it states “...strategic

leaders have a future focus. Strategic leaders spend much of their time looking toward the mid-term and positioning their establishments for long-term success, even as they contend with immediate issues.” [279]

As you review the new career field pyramid, even though the look is similar, its intent is vastly different from its predecessor. For one, it does not determine development on the type or level of agency the officer is assigned to at certain points in a career. The new career field pyramid does not have the level of vagueness—as the newer pyramid provides the officer with many potential career paths based upon competencies. And even though both pyramids rely on a rank structure, the new pyramid fosters deliberate growth using competencies. This is the difference as the new career field pyramid provides leaders with a blueprint for officer development. Potential career paths are depicted in Appendix B to this report and further discussed in sections 8 and 9.

Now that the communications officer career field has a strategy, it needs to manage the strategy so it ties into day-to-day operations of the career field. One practical way to accomplish this task is through career field strategy management that provides direction and governance to the career field strategy. By setting strategy management, the CFM has a defined process in evolving strategy to the definition of competencies and then to day-to-day operations. This very process is alluded to in the 2005 RAND report on Joint Officer Management, where the authors wrote that a strategic approach to human resource management determined workforce characteristics based upon DoD’s external environment, goals, objectives, and ability to identify and minimize gaps in workforce capabilities. [280] The key is for communications leadership and the CFM to manage the

process of examining its environment and then manifesting its required competencies to enable the mission. In the book, *The Workforce Scorecard*, it stated “...evidence shows that firms that survive and prosper over the long run develop internally consistent systems of HR policies and practices that are specifically designed to execute strategy.” [281] In gathering examples from books, GAO and RAND reports, I certainly hope that the career field strategy I depicted is adopted—because it’s a proven method to analyze the environment and then adapt the workforce to achieve mission objectives. This exact concept of adapting to one’s environment was one of the thrust areas of the 2006 *QDR*, as stated: “The Total Force must continue to adapt to different operating environments, develop new skills and rebalance its capabilities and people if it is to remain prepared for the new challenges of an uncertain future.” [282]

Career Field Management Plan

The career field management plan is derived from the career field strategy and pyramid. The plan provides structure and process to the way the CFM and his or her team systematically manage the components of career field force development program. This type planning is reinforced in the article, *Measuring Human Resource Management’s Effectiveness in Improving Performance* where it states, “HR planning involves the process that specifies the activities a firm must use in order to develop its human resources to improve its overall practices.” [283] The bottom line is that the communications career field needs a plan and associated process in order to deliberately take the strategy and make it realized in the form of action. In this plan, the CFM and associates come together to execute the strategy in a “business value chain” or “supply

chain” fashion where key decisions are made about career field officers and their development based upon the environment, career field needs, mission needs and a host of other requirements that sequentially, and sometimes in parallel produce competent officers who achieve mission success. In this section, I’ll run you through the proposed DT process, CFM processes, officer career management, and officer profiling, to name a few.

The DT meets at least quarterly to discuss Communications Officer Force Development Program and its components, the career field strategy, officer career field management plan, and to review officer records. The book, *Strategic Staffing Guidebook* calls this “Strategic Staffing” which allows “...agencies to improve staff utilization, address critical human resource issues in an organized and integrated way, and recruit, develop and deploy the talent required to meet future agency needs.” [284] The DT, in meeting quarterly for an undetermined time period, conducts strategy sessions to develop, modify or validate career field strategy and planning in order to align human resources with the environment and future challenges. IBM is a perfect example as their top management meets twice a month to focus on their human resource activities to include key business issues and workforce initiatives designed to meet initiatives. [285] IBM does this to stay ahead of the rapidly changing environment and to ensure they have a grip on key human resource planning issues that enable them to accomplish company objectives. In this light, I look at the communications officer DT as a senior level corporate board that is brought together to strategize about the future, analyze human resource strategy, and make a link to current talent pools or competencies that will meet

future challenges. According to the article, Planning Individual Employee Training and Development, the communications officer DT is a requirement as "...a company experiencing rapid growth, change, and turnover may need to emphasize long-term development of employees." [286] In the current system, the DT does not deliberately examine the career field as a whole for long-term development; however with this exact mindset and a dedicated CFM, the DT of the future can accomplish the intent of what IBM does with their senior leadership and development program.

The career field DT is charged with examining and scrutinizing the communications career field strategy. On the DT's part, it takes extensive knowledge and experience to look at mission areas and capabilities and link the two in order to validate career field competencies. However difficult, systematic, or ad hoc the DT must be, it's imperative that the senior leaders take a "hard look" at the career fields environment, future, and officer posture and theorize in which direction and what focus the officer career field must take to meet the future challenges. The March 2002 GAO report on Strategic Human Capital Management is a banner recipe for the CFM and more importantly for the DT as they embark on their responsibilities of force development. More notably, the report stated "...high performing organizations stay alert to emerging mission demands and human capital challenges and remain open to reevaluating their human capital practices in light of their demonstrated successes or failures in achieving the organization's strategic objectives." [287] The phrase "reevaluating their human capital practices" resonates the point that career field development and the strategy's success

demand that senior leadership and the DT continuously reassess the program at every meeting—no matter how long or short.

Along with assessing and evaluating the career field strategy, the DT must scrutinize the career field competencies and validate their relevance to accomplishing the mission and enabling the communications capabilities. In the article, *Does your Business Need a People Strategy*, the author proclaims that a talent or competency analysis is crucial because “...analysis examines the key segments of the workforce that the business strategy suggests will be critical for the future.” [288] The article, *Driving Strategic Success Through Human Capital Planning* further expounds on this point by stating “...business linkage requires HR professionals across the function to draw a clear and direct connection between strategies of the corporations businesses—and the human capital implications of those strategies.” [289] Both articles drive home the criticality that leadership must expend time to examine the relationship between talent or competencies and strategy—and link them for business success. I’d even go one step further and ensure that the DT understands that it’s their responsibility to make the strategic connection—with the understanding that no entity, no matter how brilliant, will ever be “spot-on”. Therefore, instruct the DT to work hard at paving the future with the following perspective:

The objective is to build a context for decision making, not to predict the future. Don’t try to predict future staffing needs with certainty or define actions to be taken now to eliminate problems that may or may not occur in the future. Instead, consider a staffing strategy as a longer-term context within which more effective near term staffing decisions can be made. [290]

Longer-term context within which more effective near term staffing decision can be made...precisely what the CFM, career field leaders and officers at all levels should be concerned with in order to accomplish mission capabilities and objectives.

Once the DT laboriously reviews and examines the career field's environment, strategy and stated competencies, they must, in conjunction with the CFM, assess the priority communications positions for field grade officers and senior captains. This is important because the career field leaders need to know what positions require the sharpest, brightest communications officers and which positions to use to grow potential career field star performers. It's equally as paramount for the CFM and leadership to know when position vacancies come open in order to plan officer rotations. Both daunting tasks require tedious examination and thoughtful planning not only with Air Force senior communications leaders, but also with DoD and joint communications officers. Accordingly, the CFM and DT must take the strategy, top positions and competency model and review the CFM's strategy documents and career field management plan to ensure that the force development program is healthy—as they provide feedback to senior leadership. This includes a DT assessment of the communications officer career field health after close review of the career field metrics—as well as a vision of future career field forecasts.

The strategy is validated, the competencies scrubbed, and the high potential positions identified, now the DT must conduct record reviews of predetermined field grade officer and senior captain year groups—based on the CFMs steady-state schedule until all year groups are reviewed. During this review, the DT will not only review the ODP and

SURFs, but the officers' promotion records as the CFM and career field leadership wish to remove any and all political biases based on previous or current professional relationships with officers. In the article, *Growing Great Leaders: Does it Really Matter*, it states "In 95 percent of the Top 20 companies, high-potential leaders are formally identified—a practice also seen in 77 percent of the other companies." [291] As alluded to in the previous passage, "formally identified" is used—not to mean "my guy or gal", "he or she works for me", or "I know that officer and he or she is awesome"—as these qualitative methods formally and currently used to choose commander and school positions have no place in an objective, records-review process. The DT will rank them according to their year groups—indicating past performance and future potential!

As part of the ranking process, the DT and the CFM will choose commander candidates and students for AFIT, NPS, EWS, EWI and developmental tours. Yes, I said choose which does not mean volunteer—as all communications officers, as part of the total force solution, should already be volunteers for any and all communications officer positions. As stated in *Growing Great Leaders: Does it Really Matter*, "Top companies strongly emphasize the effective identification of high-potential leaders, carefully matching them with the right developmental opportunity..." [292] The DT should not leave this to chance, or the volunteer "lottery"—as they're charged with identifying and deliberately developing future communications officers and potential leaders.

Furthermore, the DT will deliberately assign these officers to educational or developmental opportunities, not based on downward directed quotas, but based upon Air Force and career field needs. This means taking the officer rankings, analyzing the best

and brightest, looking at their career progression, and then assigning them to an educational position with emphasis on a field of study; or a developmental tour based on past development and future potential. As a result of these actions, the career field will posture itself in the same accord with top corporations as "...companies are willing to focus tremendous energy and resources on correctly identifying this group [high performers], giving them a rapid series of development assignments to evaluate their potential..." [293] Given the same emphasis as education and developmental tours, the DT assumes another critical job of taking those ranked officers identified through records reviews and assigning them to priority A, B, and C positions fenced earlier in the DT proceedings. Through this deliberate process, the ranked officers will be observed by leadership and challenged by increasingly difficult positions—to assess their future leadership potential. Only then can the DT, CFM and senior leadership start earmarking the most talented officers with the greatest potential for success—for leadership positions and greater challenges.

The DT's final task, and most determinant of its performance and usefulness, is the assignment of vectors and feedback to field grade officers and senior captains. Vectors and feedback provide developmental information to the officers, supervisors and chain of command. As seen in section 3, the current vector and feedback process is broke within the communications career field. However, it will not stay broke as the CFM will take control of the process from AFPC and ensure that all communications officers receive vectors based upon career field paths and acquired competencies. Additionally, the CFM will ensure all career field officers receive official feedback on their career thus far as

well as rationale on why they were given certain vectors. Major General Hawkins, the Mobility Air Forces (MAF) DT Chair, in reference to vectoring officers, stated “It’s something we do not take lightly, we try to be very open minded, and we try to look at what is best for these individuals and allow them to achieve their highest potential in the Air Force.” [294] As with the MAF DT, the communications officer DT will place the same level of importance on vectoring and providing feedback to its officers. As with vectors and feedback, the CFM will ensure that two-way communication exists between his or her staff and FAMs, senior communications leaders and officers at all levels. This is paramount as the Communications Officer Force Development Program and its success relies heavily on the communication between the career field team members and the officers in the field. Finally, after all the DT work is accomplished, the DT and CFM will finalize their proceedings and provide senior leadership with a debriefing and report outlining accomplishments and actions. Yes, this is far too important not to outline tasks and assign action officers who will accomplish the tasks.

As you recall, the DT reviews the priority positions and assigns officers accordingly. In order to accomplish officer assignments in this fashion, all communications officer positions must be base-lined, job descriptions developed, competencies assigned, and subsequently skills, knowledge, abilities, etc. Additionally, each position will be assigned a competency rating as shall each skill within the respective competency. This affords the CFM, DT members, senior leadership and the officers expectations on the level of expertise required for each position. Figure 15 depicts the position competency and skills ratings for the communications career field. So, who accomplishes this work?

The FAMs do at each agency, MAJCOM, unified command and other organizations that have communications officers working within their commands. Unlike the current system where the FAMs merely ask for training volunteers and submit requisitions, the FAMs in this new career field management

plan conduct true functional area management

duties on par with their enlisted FAM

counterparts. Now, the FAMS will build the

position descriptions with the unit-level

supervisors, who in turn will designate

Competency Ratings

0 = No Ability

1 = Conceptual

2 = Novice-level

3 = Developing

4 = Fully Capable

5 = Expert

Figure 15. Position Competency Rating

competencies, skills, knowledge, abilities, etc and then assign experience levels or

competency ratings to each. In addition, the unit-level supervisor along with the FAMs,

will categorize the position description according to which communications mission

capability or capabilities it supports. When finished, the FAMs will have standardized

position descriptions that they or their staff will load into the information technology

system's position description repository.

At this point, the reader is most likely thinking how time intensive this is—especially since leadership is downsizing the career field by 59 percent in the next 5 years. Yes, it's going to be very time intensive to stand up the initial repository; however if we don't then leadership will never get an accurate accounting or understanding of all the positions and how they align according to the mission capabilities and competencies. According to the September 2005 GAO report on Defense Space Activities, the Air Force Space Cadre is well on its way in detailing all its space positions—as the space leadership directed its

staffs to identify all education, training and experience levels for every position. [295]

The recipe to make this happen is out there in the Space arena, and if the communications career field does not select to do this strenuous task, then the CFM, leadership and others at all levels will never precisely know its competencies, work break down structure, or even its return on investment for training—as it will not be based off true requirements. Another example of this process in action was identified by RAND in its 2004 report on Integrated Planning for the Air Force Senior Leader Workforce, where it stated

“Identifying the skills each senior leader position requires makes it possible to plan the development and assignment of senior leaders so as to minimize the occurrence of the selectivity problems.” [296] I say to you as the career field decreases in size, that if leadership does not get a handle on its officer positions and aligns competencies accordingly, then the career field will end up in the same predicament as the senior workforce did in the late 1990s—with a gap between position requirements and qualified senior officers with the right skills to fill positions.

As the FAMs accomplish the initial, standardized position descriptions, the job is not over by a long shot. Loading the positions into the repository is the first step in a continual process of updating the position descriptions on demand or at least annually. This includes the position descriptions, mission capabilities supported, competencies, skills, abilities, experience ratings and training levels—all required for the inventory. Furthermore, as incumbents move out of jobs, the FAMs and leadership should require them to assist in updating the positions based upon their experience and knowledge of the attributes required to perform in the respective positions. According to the 2004 RAND

report on the Senior Leader Workforce, the assignment and update of positions should be common place, and on top of that, RAND recommends the creation of a 5-year plan for each position. [297] Now, I would not recommend that for every position, just those priority positions that senior leaders have their eyes on as potential senior leader growth positions or high-performer positions. As this process and review cycle gets set up and flowing, the CFM would recommend the coding of each position as a level A, B or C position depending on the criticality of the position and the required talent needed for the position. In order to be straight forward with the officers on their potential, leadership needs to mandate the categorizing of positions to foster increased development of the brightest stars.

One of the most important facets of this process is the information technology or repository that must be adopted, modified or developed to hold this data. It bogs my mind that when we hire a contractor, the contracting officials require a full position description to include the attributes listed above. Similarly, have you ever seen the 2-inch thick mound of paper that a leader has to fill out to get a civilian position developed and on the books. If not, it's far more in-depth than the civilian appraisal process—and that's intensive. Therefore, if the Air Force governance bodies direct that leaders develop these products for contractors and civilians, then it should be mandatory for the military positions. Consequently, leadership, after manually testing the force development program and associated strategies and plans, should consider researching an information technology tool that would house the job positions among other information for the force development program. For instance, in the 2004 RAND report, they discuss a “job

competency database” to house senior leader information—allowing position tracking, personnel tracking and analysis based off of data. [298] Now, if I were to be a knowledge manager, I would ask the question, why aren’t we sharing, borrowing, or passing on these tools that can help institutional force development. I’ll go more in depth on these matters as I progress through the next section on officer career management.

The CFM controls the career field management plan, and therefore, controls officer career management. Officer career management spans the realm from DT feedback and vectors, assignment matches, and the storage of officer profiles. According to People Portfolio Management, the article stated “If people truly are your most important asset, then put in place processes to give you the information, insight and ability to manage them like one.” [299] At present, the Air Force as an institution and more importantly the communications career field does not have the human resource processes or mechanisms to manage its officers as assets. Now, some personnelists may point to the ODP, AMS and performance reports and say they’re the mechanisms to manage officer development—and if that’s the best they can do, then good for them. On the other hand, if people are the Air Force’s most important assets, I believe the communications career field can do a much better job managing officers than simply documenting “assignment preferences” , “past performance reports”, and asking senseless questions like “does this person have leadership potential”. In order to meet senior DoD leadership’s vision as noted in the 2006 *QDR*, then the Air Force and communications officer career field have to step up and start strategically managing its officers. The 2006 *QDR* stated:

Acquiring the right knowledge and skills relevant to the challenges of the 21st century will receive new emphasis in recruitment, retention, training,

assignments, career development and advancement. Aligning authorities, policies and practices will produce the best qualified Total Force to satisfy the new demands. [300]

Even though this passage from the 2006 *QDR* is not a drastic change from Air Force doctrine, personnel leaders and senior managers are not instituting force development changes that support the intent. This passage on force development is but one in a long line of Air Force quotes documenting what must be done—though little has been done to better the process. Many articles and books are on the market that provide us answers to the dilemma, however the Air Force and communications career field don't heed the advice. Such books as *Strategy—Create and Implement the Best Strategy for your Business*, clearly outline the need for management to ensure the company has a structure, mainly processes that ensure human resource strategy and execution. [301] Even Gartner Group, SAF/XC's consultant firm hired to strategize about the career field's future, provides information on growth and development initiatives to more strategically analyze the career field and its future endeavors. [302] In their draft documents, Gartner highlights the need to move towards evolving the officer career field to include qualifications and competency tracking. This is where the CFM takes the reins of the officer career field and begins to set up structure and processes that support deliberately developing communications officers.

Accordingly, the CFM manages the DT process, coordinates meetings, keeps minutes of the proceedings, assigns taskings, and processes officer career field actions. Several crucial outcomes of the DT proceedings are career field strategy validation, officer competency opinions, and officer vectors and feedback. The book, *Human Resource*

Champions, emphasizes that leadership should provide honest feedback to employees about their performance, future potential and career records. It further goes on to mention that leadership should engage employees about career progression, needed employee competencies, and skill progression as related to the company's future needs.

[303] In the DT's limited time, the members cannot communicate with the officers, however through the CFM, the officers receive the feedback and vectors via the officer profiles, repositories, or AMS. As the officers receive candid feedback on their future potential, they build career expectations not seen or provided in today's developmental system. Currently, AFPC is prone to saying one thing to the officer via phone or e-mail, and then vectoring them or assigning them in a total 180-degree change—without feedback or rationale. As part of officer career management, the CFM and FAMs provide official feedback via AMS, the officer profile or in annual interviews or exchanges. This process change also lessens the burden of the assignment team to do what they do best, and that's strictly to put officers in positions on AMS—at the direction of the CFM.

By now, the reader can see that officer career management will be a deliberate process, tightly controlled by the CFM. The CFM is the career field development program manager—charged with ensuring the structure allows for deliberately developing officers. No longer will the career field have disjointed management—as the CFM, FAMs, and officer's chain of command will be in lock-step on officer career paths. The most central theme of the communications officers' development program, and the driving force behind having a CFM is written in the book, *The Workforce Scorecard*:

“HR’s responsibilities to the broader-based workforce are to design means of enhancing careers, building competency growth models, posting systems, and doing whatever is necessary to grow workforce competencies.” [304] The CFM is the communications career field “HR Manager,” charged with these duties and responsibilities.

After coordinating and managing the DT proceedings, the CFM takes the information, actions, findings, and officer feedback and puts it in a usable format. As the CFM consolidates information, he or she delegates many actions to the responsible entities who are charged with executing certain developmental pieces. For instance, the CFM sends AFPC a list of all the vectors and feedback for the assignment team to load into the AMS. Along with the career field vectors, the CFM also sends the listing of all field grade officer and senior captain position fills accomplished by the DT—and directs the assignment team to input the assignments into the AMS. Consecutively, the CFM, staff, and the assignment team match the junior and mid-level captains to positions. The CFM directs the assignment team to load these assignments in the AMS. At the same time, the AFPC assignment team matches the lieutenants to assignments and loads their information in the AMS. At this point, the reader is probably asking themselves why the career field is breaking up the assignment selection process among the DT, CFM and AFPC. The answer is plain and simple—the AFPC team is not experienced enough, and does not have the operational foresight or human resource management experience to deliberately place officer in assignments according to competencies and future potential. That is best left up to those senior officers with insight into growth opportunities and an understanding of career field strategy. In the same light, the reader is most likely

thinking that it's harsh to rank officers and assign them to priority A, B, and C positions according to performance and future potential. However, this process is best described in the article, *Talent Pools: The Best and the Rest*:

It is also important for management to match job assignments and other developmental opportunities with identified individual needs and development potential. It is fair and necessary to invest scarce developmental assignments and resources on the most promising talent. Of course, this should not be at the expense or neglect of other talent. [305]

As the CFM ensures that field grade officers and captains are assigned to the proper positions, and AFPC accomplishes their task of assigning the lieutenants, the CFM tasks AFCA to load the officer feedback and training requirements to the officers' profiles on the information technology system. This officer feedback is congruent to the vectors and officer feedback put on the AMS, nonetheless, it's important to input the feedback, along with training requirements into the officers' profiles to provide on location to access the information. This provides leadership at all levels and the individual officers a central location to review their career progression, competencies, training requirements and career feedback. Jack Welch, in his book *Winning*, addresses the importance of feedback as a mechanism to let employees know where they stand and what to expect as in career progression or opportunities. [306] Unlike today where communications officers only get career field feedback from the "grapevine", this feedback mechanism will deliberately set officer career expectations. And finally, the CFM and DT will be able to forecast assignment moves, strategically place officers in positions to both leverage the career field and deliberately grow competencies, and start to manage the flow of talent for the future—within the communications officer career field.

After the CFM coordinates assignments matches with AFPC and officer feedback loads with AFCA, the CFM now concentrates on taking the DT's inputs on strategy and updating the career field management plan. In *Human Resource Champion*, Dave Ulrich points out that integrating human resource practices into the business strategy is a real challenge. [307] What the CFM is doing by taking inputs from the DT, is using their experience and knowledge to refine human resource practices and the career field strategy so it better fuses with the Air Force's strategy. This key strategy feedback loop provides a fundamental check on career field direction as well as provides senior leadership with critical feedback. The DT feedback also provides leadership with an understanding and validation of the career field competencies. According to the article, *Talent and the New Paradigm for Human Resource Management*, when leaders review human resource structure, it helps to connect talent generation to strategy. [308] This link is fundamental to show how strategically aligning officers and investing time and resources, pays dividends as officers have deliberate developmental paths—focused at achieving mission success.

Although the career field management plan is mostly about the process and interaction between the CFM, DT, FAM, AFPC and AFCA, an integral part of the plan is the development and sustainment of officer profiles. Officer profiles will contain vital information on each communications officer and outline his or her career path, potential, competencies as well as a host of other attributes that describe the officer's genetic make up. As the career field begins the data call to fill the profiles, the CFM will work with AFCA and agency FAMs to populate the officer repository based on standardized

templates. This process and methodology is similar to what we discussed earlier in sections 4 and 5 on the Navy's Sea Warrior program—as Navy personnelists spent countless hours populating their repositories to base line their enlisted corps. Once the arduous task is complete, the communications career field will have officer profiles that will help them identify and track all its officers. More importantly, it will streamline the manner in which the career field matches officers to positions—to include storing all communications officer positions. In reference to the article, *Supplying Labor to Meet Demand*, the author wrote “People with access [to the system] will be able to search the database for personnel with specific skills or training and will be able to assess their availability and qualifications immediately.” [309] This demonstrates how supervisors, FAMs, the CFM, AFCA, DT members, and leadership will have access to a single repository with all officer records—allowing total situational awareness over all its officers.

The system and the contents therein, comprise a new tool to store information and knowledge about the communications officer genetics. Basically, it's a blueprint of each officer—allowing search of like officers, officers with certain skills, officers certified in various competencies, officers qualified for positions, acquired education and training, and so much more. However, according to *Working Knowledge—How Organizations Manage What They Know*, information is just information—as it depends on how leadership intends to use the information. [310] If the CFM and leadership at all levels use the system to share knowledge on career paths or other human resource functions, then the profiles and system will become a knowledge-sharing device. What officer

information would they store and standardize? For all officers, the system would store past assignments, education, official training courses, certifications held, competencies and acquired skills, past and potential career paths, potential development tour, mentors, assignment preferences, vectors and feedback. On the whole, it would store the “genetics” of the officer—allowing deliberate planning of individuals as well as the communications career field.

Career Field Training and Certification Process

The Communications Officer Force Development Program requires a viable career field training and certification program—supported by a streamlined process. The training and certification process will directly link training requirements and initiatives to officer development plans. This allows the CFM and AFCA to track return on investment of the dollars spent versus realized competency and skills development. In industry, Fedex does an extraordinary job of associating training to growth as stated in their book, *Fedex Delivers*: “Ongoing training can only be accomplished by developing and presenting a comprehensive talent development strategy that directly relates professional development needs and plans to successful execution of the company’s business growth strategy.” [311] Unlike today where the career field does not deliberately tie training to officer development strategy, the new Communications Officer Force Development Program will connect training and certification to officer development and strictly track resources expended versus competencies and skills acquired while in training.

Lieutenant General Robert Shea, the J6 Director for the Joint Staff, in a December 2005 Intercom article discussed the importance of training in today's rapidly changing environment and alluded to the fact that training is as critical to success as are the DoD's advances in information technology. [312] Training is critical to success because as pace of information technology continues to increase, the communications officer corps will have to adjust—and they do that through becoming more competent at their jobs. As employees become more competent and experienced in their jobs, they become key enablers for business strategy and execution as seen at General Electric and Motorola—as they stood up formal corporate training programs. [313] In standing up formal training, leaders are looking for ways to grow their employees, arm them with the tools, experience, knowledge and competencies to perform their jobs. When companies look at employees through a training “lens”, they are looking at investing resources and time into employees through extensive training—and not looking at them as a cost of doing business.

The quintessential investment for a company or the communications career field is to build and manage a training and certification program. Currently, the career field does not have a structured training and certification program—so it's extremely hard to show how allocating dollars to training provides any true return on investment. According to AFDD 1-1, all organizations should train to mission needs. It specifically states that “...trainers must assiduously seek the current requirements of the operational and warfighting community and craft programs to meet those requirements.” [314] In this paper, I link training to competency attainment by showing you how competencies and

skills are derived from knowing your environment and what capabilities you require to accomplish the mission. AFDD 1-1 goes on to explain that training builds skill-expertise which is needed for officers to meet mission demands, especially those where the environment or mission is changing rapidly. [315] As an investment, one that will hopefully pay dividends in the form of acquired skills, it's needed to broaden officers to see the bigger strategic picture as well as deepen in certain technical fields. The bottom line with a training and certification program is what's written in *The Workforce Scorecard*, "Investments in training should lead to employees with more strategic clarity—faster in getting things done, more innovative, collaborating more, more talented, able to learn, and with clear accountability for business results." [316]

In building the training and certification program, or better yet a plan to structure the program, leadership must base it off of the career field strategy and career field management plan. If done correctly, the training and certification plan will enable the program and will support the successful execution of the Communications Officer Force Development Program. From earlier discussions on the communications career field strategy, you recall that the CFM and DT reviewed the strategy and validated its intent. The CFM and AFCA, to construct a program, must take the strategy, the listing of the officer career field positions, the capabilities, competencies and their make up, and build a training and certification program that develops and certifies the competencies along with experience levels or ratings to enable the capabilities and accomplish the mission. Additionally, the CFM and AFCA must determine the certification requirements to include the competency levels or ratings that will suffice for full certification.

Certification information is depicted in the training and certification sections of each competency in Appendix A. At the same time, AFOMS representatives will take a large sample of the officer career field and conduct an occupational survey in order to corroborate the career field competencies and provide inputs to the CFETP. Conversely, after the career field sets up the communications strategy that feeds the career field management plan, the leadership may cut or cancel the need for AFOMS' assistance as the process of validating positions and competencies is built into the force development program. Either way, the career field requires the competency data and capabilities in order to stand up the U&TW.

The CFM and AFCA stand up the U&TW once a year to review the training and certification program. From discussing past U&TW forums with several former participants, the workshop lacked focus, level of experience, and expectations for the processes and products that were expected from the group. That changes under this new program as AFCA will run an agenda-driven, results-oriented U&TW—focused on training, certification, competency development, and the creation or validation of key measurements. In the agenda, AFCA will have the prerogative to assign criticality to issues or emphasize one issue over the other; however, the following will be reviewed at the workshop. The CFM, AFCA, FAMs and other invited members will review the operational and tactical competencies to understand their composition of knowledge, skills, abilities, experience, training, and certification. In this forum, the team will not look at potential development tours as that's best handled by the DT. As the team reviews the competencies, each member is looking for gaps between what training is

provided and what training is required according to what skills and knowledge the competencies require. If the team decides to add, modify or delete training courses, the CFM and AFCA are the final authorities to make that decision. However, careful attention is required in making these decisions because the new or modified training will need to be sourced and if through AETC, it will take an extreme amount of time to write, re-write and get course approval. In re-evaluating training, AFCA has the ball on deciding whether to field the course in AETC, provide with in-house AFCA resources, outsource the training, use another government source, or build an on-line course using the AFIADL resources. Which ever way AFCA and the CFM decide to go, training curriculum development must be deliberate, it must support competencies, must be economically feasible, and link to capabilities and mission areas.

The other two items are equally important, as certification and measurements provide tangible, objective numbers to prove impact, effectiveness and efficiency. In reviewing certification, CFM and AFCA must decide on whether to build a separate certification course for each competency, or use an already existing course by another federal agency. Most important is to get some semblance of a certification program and process into the field for feedback. Now, the certification is only one indicator of competency—along with your career field upgrade, training courses and the new CFETP. The CFETP is immensely valuable in certifying an officer on attained competencies and skills. The U&TW must take a hard look at the CFETP, evolving it from signing off and tracking tasks, to one that categorizes the competencies according to skills. This way, officers are in the business of attaining skills instead of accomplishing tasks. The final agenda item

for the U&TW is reviewing all career field paperwork and drafting key measurements that show senior leadership that you and your process are getting better with each passing day. Of course, the CFM is the final authority on making and distributing measurements.

The U&TW has met, the competencies are reviewed, the team linked training courses to required skills in the competencies, the team validated the occupational survey and CFETP against communications capabilities, the team validated the certification requirements and courses, and then developed, modified, or deleted measurements that would depict the health of the training and certification process. Now it's time to track officer progression, especially as it pertains to the training and certification program. AFCA who is the lead for the training and certification program, will track officer training and certifications. As the lead, they will work with the agency FAMs to track officer progression. In turn, the agency FAMs will work with the respective supervisors and officers on ensuring that all official communications courses are loaded and tracked as well as certifications. This system will also field the CFETP, of which the supervisor loads the required competencies and skills to be tracked. Finally, the supervisor or officer will send the FAMs any additional courses not in the system, for approval and then inclusion into the system. If managed correctly, this tracking process will allow streamlined processing of training and certification—as well as allowing AFCA to have oversight and control as owners of the program.

How will AFCA gather requirements? In today's environment, communications courses are not based off of who requires training, but based off of who volunteers for the training. This is a fundamental flaw in the system as leadership cannot track

development based off requirements. However, in the new program, AFCA and FAMs will do data dumps on the system to gather firm requirements based off of officer current positions, future positions, certification requirements, acquisition requirements, and rank requirements—all tied to competency pools. AFCA will work with FAMs on a quarterly basis to pull past-due training reports, 90-day training reports and future position training requirements. The FAMs will coordinate with the supervisors and officers on setting up dates and then the FAMs will load the reserved training dates in the system. Then, the system will update—allowing AFCA to see the training statuses of all communications officers and confirm attendance through the FAMs. This enables two other critical program facets—the ability to measure training across the career field and the ability to gain economies of scale for training courses as the career field is not over scheduling training and then merely filling quotas. As a result, the career field has a training and certification program based off of requirements and tied to deliberate officer development. For more information on competency composition as well as projected certification time lines, the reader should review Appendix A.

Among the many responsibilities assigned to AFCA as the training and certification lead, AFCA will oversee the officer profiles—as it's directly linked to competencies and training. The training and certification data is part of the officer's profile, and as such must be kept current by the constant review of the officer and periodic review by the FAMs and AFCA. As part of the quarterly training updates, AFCA will mandate that all officers, supervisors and FAMs review the officer's profile to ensure all information is accurate. This is important because AFCA runs data dumps and measurements requests

from the data base—and is an equivalent process to how A6X staffs run “blueprint” data dumps to gather infrastructure requirements. Albeit a streamlined process, if the data is not current then the data dump is useless—so AFCA will work with the FAMs to get this accomplished. Finally, the CFM and AFCA coordinate the quarterly reviews to coincide with the DT proceedings so the DTs have up-to-date officer profiles as the DT members use the profiles to review officer competencies and career paths. Upon implementing this program and the overall force development program, it will take time to base line and load officers—depending on the development, adoption, or modification of an information technology system to house the officer profiles.

As with any program, the cost – benefit analysis is key in determining whether senior leadership will invest in the program. With budget and manpower cuts, I honestly don’t see a mandate to go to a system or program as I’ve outlined in the paper—because leadership hasn’t done it yet. Think about it, the Navy is going to this structure, the Army is somewhat there, OPM and Department of Labor instruct government agencies to do it, and GAO and RAND write many reports each year on the fundamental tenets of a force development program. And yet, over 3 years, the Air Force still does not have any program close to what leadership states we do in briefings, articles, transformation plans, etc. However, it does not stop me from writing about a program that would allow the communications career field to maneuver through tough times, draw down the force with an understanding of competency counts, and provide leadership with a flexible human resource program that could grow a steady stream of officers through the ranks. All this takes money, resources, people and time—of which the Air Force is short on these days.

However bleak, the GAO reports in a July 2004 report on Professional Military Education that measurement is crucial in developmental programs as leaders want to see a return on investment. [317] I'll touch upon measurements later in this section and then outline some potential metrics in section 10 of this paper.

Officer Growth Strategy

An officer growth strategy consists of the institutional development programs described throughout this paper, plus unit-level execution, officer competency development, leadership potential, and the officer's commitment to grow. It's sort of a smorgasbord of those practices that happen at the unit-level that may or may not be captured in performance records, personnel files, officer profiles, or other data collection mechanisms. In AFDD 1-1, it states "Developmental processes and systems take individual capabilities and, through education, training, and experience, produce skilled, knowledgeable, and competent Airmen..." [318] Even though it's extremely important to have an institutional force development program that tracks officers, it's still relevant to take notice that a majority of an officer's growth and development happens at the unit-level, with the help of a senior officer, senior NCO, or mentor. In *Talent Force*, it explains the unit-level growth responsibilities from the leaders perspective: "As a leader in any setting, the more you work to recognize, attain, nurture, and develop the spectrum of talent in your organization, the more the organization will realize its potential and the more successful it will be." [319] So as an officer grows and develops talents, the more valuable they become—and the more their performance benefits the organization. It

works for everyone and must be discussed in this paper because leaders at all levels must fulfill their portion of force development.

Think about it...a new lieutenant, or captain, or better yet a new field grade officer enters your unit. From that point forward, it's the leader's job to develop and grow the officer, and the reciprocal is true as it's the officer's responsibility to engage in developmental activities. According to the Army Field Manual 22-100, a leader must be a teacher who continuously gives their subordinates knowledge and skill—whether in a formal or informal setting. [320] Now imagine if the communications career field had measurements to gauge how the leader and officer were both doing in the officer's developmental efforts. Of course, the leaders would document quantitative officer progress on feedbacks and performance reports. Conversely, the chain of command could review officer development progress and give the leader quantitative performance feedback—based upon factual, objective data. Consistent with this frame of thought on holding leadership and officers accountable for development, “In 85 percent of top companies, leaders are held accountable, through the performance management system, for developing other leaders.” [321] However far-fetched, this concept of holding leadership quantitatively accountable for officer development is solid and warrants consideration by top leadership. Though I digressed, implementing the Communications Officer Force Development Program will take a grass-roots effort, enforcing as well as encouraging unit-level leadership to actively engage deliberate officer development—in order for this program to succeed.

In the new program, the CFM, with the full backing of senior leadership, fields the program, career field strategy, career field management plan, new CFETP, new training and certification program and measurements. The CFM briefs the FAMs and arms them with the information to brief unit-level leaders and officers. Now, it's incumbent on the unit-level leaders and the communications officers to take and embrace the program—like enlisted communicators do with their career field certifications, CFETPs, JQs and CAMS. As leadership embraces the force development program, they put in place a unit-level structure that supports and enables the execution of the components of the program. For instance, upon an officer's assignment, supervisors will review officer profiles and tailor the CFETP skills according to officer competency certifications. Simultaneously, supervisors will develop individual training plans based off the position description, mandatory competencies, skills, and knowledge, and required training and certifications. Then, supervisors at all levels close the loop with fundamental and continuous feedback—providing officers with a gauge to base short-term and long-term expectations. The CFETP, competencies, skills, developmental plans, training, certifications, and feedback build the foundation for on-the-job training, or better yet called “experience”. These are the responsibilities of unit-level leaders and directly supports and ties into the developmental program.

As previously mentioned, leaders set up individual development plans (IDPs) for all officers. What do the plans include? For starters, the IDPs include officer rotation plans, competency certifications, and projected mission and career field training. According to the book, *The Knowledge-creating Company*, “[Job] Rotation helps employees

understand the business from a multiplicity of perspectives. [322] As with business, as officers serve in positions for a long time, leaders will move them to other jobs to gain knowledge, experience and a broader conceptual view of the military. When this happens, officers become more competent by acquiring vast skills and abilities—earning competency certifications. Thus, officers become more talented, they earn certification and upgrades—and the unit looks upon them as an investment, funneling more money towards their development. The development comes in the form of education and training opportunities. As the Talent Pools article exclaimed, “Observe, through performance, individual’s demonstrated capacity to learn and adapt to new challenges. This is not a selection process, but rather, a spotlight on talent with development needs in mind.” [323] As officers are investments, leaders look to channel the resources to those who will benefit from the additional training and development. Also important and key to the development program, all leaders must get their officers in mission and career field training. As depicted in AFDD 1-1, career field training focuses the officer on structured skill sets and provides the officer with competencies and skills to achieve mission success. [324]

At unit-level, leadership is charged with developing officers—growing them to perform in their current as well as future jobs. This takes time, money, and manpower away from mission essential tasks that officers are hired to do in their present job. So leadership at these units must ask the tough question—what difference is training making on today’s mission as well as future missions? In the article, *Measuring Human Resource Management’s Effectiveness in Improving Performance*, the author points out

that training effectiveness must be aligned with, and support the overall business strategy.

[325] So, you have an officer who is getting trained—and leadership must ask what development returns is the Air Force, the unit and the officer getting on the investment outlaid on the training. As the leaders invest in the officer, the leader should be thinking of the unit impact and Air Force impact—as the officer will prepare for his or her future job, or a deployment based upon development growth. Developmental growth concerns training, experience, competency and skills development, etc. Currently, these type attributes go in the ODP via AMS—providing feedback to senior leadership and the AFPC assignment team. As noted earlier, the DT and CFM will focus on vectors and feedback from this point forward—as the capable authority to make field grade officer and captain career decisions.

A critical function of unit-level leadership is to develop the officer's competencies, both technical and leadership competencies. The leader uses a mixture of IDPs, training, position rotation, mentorship and challenging projects—to grow the officer's skills thus gaining them competencies in respective areas. Additionally, the leader's job is to account for the officer's competencies in the information technology system as well as competency certification and document associated training. All these facets comprise the unit-level leadership responsibilities so important to the success of the overall force development program. It's one thing for senior leadership to set governance and program guidelines—but the real work is done face-to-face with the officers. The March 2002 GAO report on Human Capital Management stresses the point that leadership must stay focused on developing officers and tracking their skill sets in order to get a better

accounting of all skills and performance indicators for developing officers. [326] Thus, through institutionalized developmental efforts, unit-level leaders have the blueprint to develop their respective officers.

The blueprint for developing officers also includes the prospect of targeting education and developmental tours—as key enablers of an officer’s overall broadening within the communications career field. Leaders should look at past performance and more specifically future potential in targeting an officer for Air Force educational opportunities. Even though the DT and/or the CFM choose which officers attend graduate school, the unit-level leader is the catalyst for making school selection a possibility. The leader must take into account performance indicators and future potential in the rapidly changing communications environment. Additionally, the leader needs to counsel the officer on possible degree programs—as to mentor the officer on what graduate degrees would mesh with the future of the communications career field. The same concept holds true for professional military education—as the leader has a responsibility to mentor the officer and think about the challenges within the career field. The article, *Measuring Human Resource Management’s Effectiveness in Improving Performance* explains the duality between this concept of systematically developing officers within their career field through education and the return on investment for the betterment of the career field as a whole. [327] Even though the leader is removed from the higher levels of the career field, he or she must keep constant vigil on officer development to improve career field prowess. And to further this discussion, the leader also has a responsibility to look for officers who have unique talents—that if harnessed,

allows the officer to broaden into other career fields through developmental tours. As such, the thrust to put junior officers into developmental tour positions start with the unit-level leader who stresses the importance of a grander operational view.

No force development paper is complete without a review of leadership responsibilities as it pertains to the growth of officers. As the reader reviews and analyzes the new career field pyramid, it's not evident that leadership was considered in the new schema. However, from my perspective, leadership characteristics are part of the officer's composition and a key ability in achieving competence in a particular skill or specialty. According to the article, Elements of Defense Transformation, leadership development and characteristics are essential in achieving transformation within DoD and meeting the challenges of a rapidly changing military environment. [328] What's more important to recognize here is that leadership is not something that senior leadership can dictate or mandate, it's a process of continual mentorship, face-to-face interaction and constant challenges that grow leadership attributes in officers. The big push these days is to advertise a "reading lists", mandate "leadership conferences", and write papers on the recipe for "ultimate leadership" – like it was a commodity, buy two, get one free. AFDD 1-1 states, "Creating future Air Force leaders is the responsibility of the current leaders, and force development is their tool to do so." [329] I would agree with the first part that leadership's responsibility is to create leaders, at all levels, but I would not agree that force development is the tool to do so. It actually sounds like the Air Force intends to "punch out" leaders like a factory line. On the contrary, it takes deliberate mentoring,

experience and trials-and-error to become a leader—not mandates by leadership or force-development tools that can't even get skills development right.

How do we develop leaders at the junior ranks? First and foremost, officers turn into leaders by having strong mentors or unit-level leaders who take the time and energy to deliberately counsel young officers. Army Field Manual 22-100, chapter 2 states “Leaders of character and competence act to achieve excellence by developing a force that can fight and win the nation’s wars and serve the common defense of the United States.” [330] This is the emphasis that unit-level leaders must have to develop their officers to achieve mission challenges and turn them into successes. The Army, in the article, The Be, Know, Do Model of Leader Development, stresses that to grow leaders is to develop the “whole person”—one that uses competencies to make better decisions in accomplishing the mission. [331] What the field manual and the article show is that leadership develops leaders through growth opportunities, such as assignments, education, training, temporary duties and increased responsibilities. These type of challenges or opportunities increase the officer’s chances to be put in strenuous situations—as to put the officers under-the-gun. Through tough situation, officers develop competencies and skills required to meet future missions—and become better leaders because of the rigors of decision making. Also, when officers are in tough situations, it gives them the chance to be creative and apply past lessons to new situations—thus testing their leadership prowess and technical skills. This is what it means to be a leader—and these traits, these abilities, these lessons are learned through

day-to-day interaction with unit leadership and develop as part of the competency growth process.

The unit-level leaders have a stake in leadership development—creating an atmosphere for officers to experiment, work, train, build skills, and absorb leadership lessons from leaders and mentors. The officers also have responsibilities by working hard, deliberately planning and accomplishing their studies, going to training and completing certifications. Comparably, the officers have a responsibility to commit themselves to growth opportunities and make themselves available for when these type situations arise. Jack Welch, in his book *Winning*, looks for five attributes when hiring young leaders: positive energy, ability to energize others, courage to make tough decisions, ability to get things done, and passion. [332] These are the same attributes that officers should internalize and display as they develop within the career field. The officers should exude these attributes and take the reins of their careers as force development will only assist so much before returns diminish. Thus, the officers must take stock in their own career, assisting unit-level leadership in developing career plans, competency allocations, certification completion, and training opportunities. Most of these attributes come to light when the officers choose a mentor to emulate. According to the article *Using Mentoring and Storytelling to Transfer Knowledge in the Workplace*, “...a number of studies have found that individuals who are mentored perform better and are promoted more rapidly, presumably because they have learned and absorbed knowledge from their mentors.” [333] Choosing and acquiring a mentor is powerful, as the mentor shares knowledge and fosters officer growth during the junior years of a

career. It provides the officer, if assertive, an anchor or leverage to assist the officer in making correct decisions about myriad different items. Finally, the officers must look for educational and training opportunities outside the job—in order to grow and broaden their view of the environment, government, etc. Within the officer, this promotes the cycle of continuous learning as outlined in FM 22-100, Chapter 4. Chapter 4 states, “Continuous learning requires dedication to improving your technical skills and tactical skills through study and practice.” [334] And this dedication fosters an officer’s commitment to grow and become a better leader and tactician.

Career Field Metrics Strategy

With the advent of the Communications Officer Force Development Program and the subordinate career field strategy and management plan, the communications senior leadership needs measurements to gauge success. Currently, the lack of measurements, metrics or graphs makes it impossible to measure success from the efficiency, effectiveness, and impact standpoints. According to John Sullivan, a HR expert, a sound HR metrics program “...enables HR to converse with senior management in the language of business.” [335] Similarly, a solid set of career field force development metrics would provide the senior communications leaders with a gauge of the career field’s health and effectiveness. More importantly, it would allow senior communications leaders to succinctly answer career field competency inquiries from senior Air Force leadership. For instance, say one day, the Secretary of the Air Force randomly asked Lieutenant General Peterson how many communications officers were qualified to take on cyber warfare operations. Would Lieutenant General Peterson be able to answer the question—

or would he have to staff it out to the Warfighting Integration staff? When staffed out, would the workers know where to go or how to get the information? It would be hard since the career field leadership does not track career field competencies or skills. And from this example, the reader should be able to surmise that this is a plaguing question, especially in the midst of a draw down that could or may cut valuable competencies—ones we don't even know exist.

Throughout this section, I stated that the career field strategy supports the business strategy. Then, I stated the career field management plan supports the strategy. As seen in the book, *The Workforce Scorecard*, a good metrics program needs to support the whole HR program as stated by the author: "...we believe that successful execution of a firm's strategy requires a clear business strategy, a workforce strategy, and a strategy for the HR function. We also need metrics to assess the progress of the workforce as it pursues the firm's business strategy." [336] In section 10, I'll show you that the career field will have vital metrics that gauge the success of the workforce or career field strategy, as well as the HR function—in our case the career field management plan. And, in implementing the metrics or measurement program, leadership should take a careful, practical approach—measuring a few processes, products and impacts first and then start to mature the metrics program to meet leadership needs. This is called the collaborative approach, in which you develop a core set of metrics and then strategize with leadership on how to improve and evolve the metrics that gauge the bottom line success of the organization. [337] As stated above, I'll outline a metrics program in section 10.

Career Field Information Technology

As you, the reader have progressed throughout the paper thus far, you've noticed the term "information technology system" as referred to storing communications officer profiles, competencies, training courses, and other pertinent officer information.

Hopefully by now, you've come to the conclusion that the "information technology system" is a notional system—one that will be built, adopted, modified, or acquired once all requirements have be identified and allocated to a project. It's critical at this juncture to realize that I'm not in the business of "drive-by fieldings", inadequately deploying systems that don't meet the career field's needs. However, what I advocate is a full research project, taking the information and requirements in this paper and conducting a search for industry products that, if tailored, would provide the answer to the career field's information technology requirements. There are companies out there like Peoplesoft, SkillsNet, General Electric, Microsoft and others that either build human resource systems for industry or have internally built their own human resource system. The career field should research these companies and others to find answers to our human resource information technology needs.

The career field needs to build a requirements document along with requirements grading criteria in order to adequately source a system that will manage the officer and career field information. For instance, Success Factor Systems has a tool that allows companies to track competencies, skills, knowledge, and potential—and then match people to jobs using those factors. [338] This is but one company out of many who have cracked the code and are building human resource systems for industry—with great

success. Another example is the Navy and their SkillsNet product that does the same as the Success Factor system. In comparison, SkillsNet provides a system, based off of Department of Labor standards and handles careers from inception to retirement. Many other examples exist where companies are aiding industry in automating their human resource processes and products. As I write, I'm cautious that the career field's first inclination is to run out and hire the first contractor who has a viable product, or to hire a consultant firm to develop a product—that may or may not answer the task. And there is one more catch and that is DoD is attempting to field a cradle to grave information system for its workforce, called the National Security Personnel System (NSPS). This system is critical to human resource transformation efforts with DoD and sees it helping the department meet its 21st Century challenges. In reviewing the specifications, the GAO stated "...this new human resources management system, if properly designed and effectively implemented, could serve as a model for government-wide human capital transformation." [339]

The bottom line with information technology is that people usually want to skip the requirements stage and apply or throw technology at a process problem in the hopes that the problem miraculously clears up. This is usually not the case as the problem must be attacked from the roots—and that's normally because no one person took the time to properly build and test the processes. In *Building a Better Workforce*, the author points out that it's better to implement a manual process first and then apply technology as a lot of your requirements will flush out by running your process. [340] In looking at this smartly and through the human resource lens, the communications career field should set

up the force development program first, run it for a year, and then apply technology.

This will allow an industrious AFIT student the time to properly research a solution to the communications officer career field problem—thus making a major impact within the field.

Conclusion

There comes a time when leaders at all levels have to step back and ask what are we doing! This is one of those times when you look at the force development program and ask is it really paying dividends, are we deliberately assigning officers to positions based on growth potential, are we looking at competencies and skills, and does senior leader understand that these critical attributes of a force development program are not happening. The other day, I had a professor who talked about transformation and stated that true transformation is not modifying current programs, but tearing them down and building from scratch. If that's what it takes to make true force development transformational, then it starts with this paper—at least for the communications officer career field. Leadership must review the tangible thoughts in this paper, take or don't take it all—but at least review the paper with an objective view point. Only then can you start connecting current force development execution, or lack thereof with the force development intent written in doctrine, force development briefings, DT handbooks and senior leadership sight pictures.

“In an environment in which people are described as an organization's major asset, it would be expected that the HR function would have gained considerable influence.”

[341] Especially in today's rapidly changing environment where the Air Force is not

only grappling with modernization issues, but also facing a draw down of an estimated 50,000-plus personnel in the next 5 years. As the Air Force stands face-to-face with the ominous challenges, the institution must re-visit and transform the way it handles its human resources management program. In the article, *Talent and the New Paradigm for Human Resource Management*, it discusses the need for organizations to institute a decision science for talent—allowing any unit to “...achieve competitive success through one of their most important resources, the talents of their people.” [342] Albeit I go into excruciating, and to some extent, mind-numbing details on the communications officer career field process and information exchanges, I believe I point out the “science” required to successfully implement and manage a human resource program. Nonetheless, I leave that up to you, the reader to make your own conclusions.

As I pondered the conclusion to section 6, I decided not to bore the reader with a laundry list of what I covered in the previous 75 pages. However, my intent in writing this section was to show the reader and leadership that a human resource program takes work, it takes strategy, and it takes a continuous process to re-evaluate the environment all the time—in order to maneuver and refocus human resource assets to achieve the mission. The book, *The New Strategic Thinking—Pure & Simple* brings up a great point on strategy: “The need to think about strategy and direction usually surfaces during a crisis. Our view is that strategic thinking should occur during good times as well as bad times because, if you wait until the bad times, it obviously becomes more difficult to do.” [343] This passage is so indicative of the way we implemented the force development program—like a pilot program to see if it was going to work. Now, we really need it to

work, and it's too late to actually get the program to assess talent and deliberately grow Airmen, but more importantly officers. The book also goes on to describe the norm for companies after they've either attempted to make change or haven't started to make change as it relates to a human resource strategy or business strategy:

The worst of all strategic crimes and the 'kiss of death' for any strategy even a good one—is to have an outside consultant develop your strategy. No outside consultant has the right to set the direction of your organization or knows as much as your people about the business and the environment it is facing. [344]

I believe this last passage to be the truth and that's why I introduced the Communications Officer Career Field Strategy earlier in this section, and that's why I'll walk you through an example in sections 7, 8, and 9. It's far too important to leave a career field's strategy or its human resource strategy to a consultant company, or to an ad hoc strategy. A strategy takes time to develop, time to mature, and takes leadership's understanding that a strategy has to be management, tailored and modified according to environmental effects and impacts. So, onward to section 7 to discuss the Communications Mission Capability Analysis...

VII. Communications Mission Capability Analysis

Introduction

“Those responsible for defense transformation must anticipate the future and wherever possible help create it. They must seek to develop new capabilities to meet tomorrow’s threats as well as those of today.” [345] This passage came from the article, Elements of Defense Transformation and bears a vital truth for all organizations and personnel—that we must stay vigilant to new capabilities that provide us a competitive advantage. In doing so, the Air Force, and more particular the communications career field must constantly reassess its external environment for emerging drivers that spawn the need for different capabilities. The June 2005 GAO report on technology emphasized this very same point: “The ability to spur and leverage technological advances is vital to sustaining DoD’s ability to maintain its superiority over others and to improve and even transform how military operations are conducted.” [346] And since transformation is the “buzz” in the military, it’s transformation that will allow the communications career field to sustain the ability to assess its environment and focus its officer corps to produce capabilities that achieve mission successes. This transformation is the kind of thought pattern, strategy, and execution that challenges senior leadership to continuously re-evaluate the career field’s environment for new and emerging capabilities—and to focus their most important assets, its people on enabling those capabilities.

Transformation means that the Air Force reinvents itself into a service that accepts change as the norm and then develops concepts and structure that incorporates mechanisms that allow its forces to plan and operate accordingly. Far too often, do we

witness the Air Force hiring contractors or consultants who come in and plan the future for us—crippling Air Force personnel from learning and applying crucial techniques that would allow it to learn how to survive and evolve on its own. Often burdened with this task, contractors do an awesome job of developing eye-watering DoD Architecture Framework views and thorough concept of operations. However, these products tell us how to get to the next stage of evolution—instead of instructing or guiding the Air Force on how to handle constant change. An article in the October 2005 Intercom magazine alludes to this situation by stating “...if we are to remain the world’s premier air, space, land and sea Total Force, change will be inevitable.” [347] Right there, the article tells us that the Air Force must accept change. Then the article stated “It’s up to all of us to adapt to that change, by accepting responsibility for our own success, that of our unit and our service.” [348] That responsibility for accepting change falls on the military and civilians, and specifically the officers who are charged with leading people and accomplishing the mission. And the kind of change officers can expect, especially communications officers, is pointed out by Mike Ruetters, Executive Chairman of EMC Corp, in the book, *Fedex Delivers*: “...technical knowledge today has the shelf life of fruit. It’s very easy for companies and even entire countries to fall behind in understanding, applying, and creating new technology.” [349] Thus, communications officers must focus on technological change that rapidly and conspicuously evolves, sometimes outside of our situational awareness. This is why Lieutenant General Kenne, former Deputy Chief of Staff for Warfighting Integration so pointedly stated “Our

challenge is to be poised to swiftly and decisively meet today's security challenges, while planning to transform into tomorrow's fight force." [350]

Today, the communications officer is burdened with more responsibility, while receiving less manpower and budgetary resources—although still charged with getting the mission accomplished. Some senior briefings state the officer career field will experience more manpower and budgetary cuts due to the continuing war and modernization efforts. Furthermore, these same briefings proclaim that we'll make these cuts and then transform or implement "lean" to operate more efficiently. And other briefings say we'll just go without, or not accomplish some of the current mission tasks, or pass the mission off to other career fields—not highlighting the fact that other career fields are taking cuts and probably passing things off on the communications career field. In reading many briefings and engaging in many discussions with peers, this writer poses the question, shouldn't the communications leadership and officer corps be defining our new processes, evaluating lean applications, and identifying work break down structures in order to estimate manpower and budgetary cuts instead of mandating cuts and then working the rationale. I know I'm probably stepping on toes, but senior leadership needs to understand that these are the conversations, debates, and questions future leaders are poising in the field. And, the outcomes and results of decisions being made today will affect the future communications officer career field and the way we'll have to lead and manage in the future—so it's not only relevant but our duty to ask questions and debate the issues. As the debate draws on, most issues center on the communications leadership

and its officer corps' ability to properly address its environment and the capabilities required to meet the strategy laid out in transformation plans and Joint Vision 2020.

There are several tools and mechanisms that aid the communications officer in assessing its environment; however at times I question the overall integration strategy of the tools or their applicability in adequately assessing capabilities. For instance, I look at Gartner Group's current Operational View 1, depicting the notional communications structure and operations—and wonder if it explains how the career field will continuously adapt to changes, or does it tell me a “destination” or common state to achieve. [351] The same themes hold true in briefings and concept of operations where leadership states an end-state and nowhere does it describe a mechanism or process to get the officer career field to manage change. Albeit having future focus and an end-state are very important, but I would think it's as important to have a process in place to manage change and adaptation. In a QDR news briefing conducted by Ryan Henry and Vice Admiral Chanik, they both alluded to the fact that there were areas in the QDR that required more in-depth analysis due to a lack of options and capabilities. [352] With a continuous process that incorporates change as a driving force and central theme, leadership and the officer corps could more rapidly identify capabilities and institute solutions versus always being under-the-gun to document end-states and destinations.

Communications Mission Capability Analysis Purpose

“Naturally, one cannot be 100 percent right about the future, and totally unexpected events do show up. But, if one knows where to look, one can decode the future today.” [353] Having a continuous process that scans the environment for driving forces and

indicators can help senior leadership “look in the right places” to find solutions to problems spawned by the rapidly changing environment. In comparison, I would equate this process to a strategy “spiral” process that continuously scans the environment, highlights findings or discoveries, compares those findings to the current end-state, makes changes to the end-state, and adjusts resources accordingly. As you read this, it probably sounds somewhat parochial—but this is the same process used by many leading companies and recommended by the GAO in its strategic human resource reports. For instance, in AFDD 1-1, the doctrine discusses the need for defining capability-based requirements in-and-around the Air Force’s environment in order to integrate resources to produce desired capabilities. [354] The defining of capabilities is not a one-time action, but a continuous analysis of the environment that drives resource allocation and funding to support results. The same holds true for the communications officer career field, where it must constantly analyze its environment and assign resources accordingly. However, as mentioned earlier, briefings and papers do not discuss any continuous process for analyzing the environment—so it’s paramount that one be discussed and implemented in order to properly and continuously assess the communications environment.

In the book, *The New Strategic Thinking – Pure & Simple*, the CEO of Caterpillar Company described his outlook on the subject of continuously assessing their environment:

As we look at the world today, it’s changing much more rapidly than it’s ever changed before, with the influence of new information technology and so on. And the way we do business today versus how we may be doing business 20 years from now, it’s hard to imagine that

it's going to be the same. That has tremendous implications for companies such as ours. As a result, I think it just says you have to continue to do this [strategic thinking] over and over and over. [355]

The same holds true for the communications career field. Leadership and its officers must mandate that a continuous process be used to constantly assess the environment and update planning documents and guidance accordingly. However simple sounding, the writer is not naïve to the fact that the budgetary, planning and acquisition processes are not as agile and flexible as a continuous career field planning processes—so folks much smarter than I must put some brain cells into how the career field can make this happen. To do that in this paper would detract from the emphasis on how to demonstrate the Communications Career Field Strategy and its main focus on identifying the career fields mission capabilities that the officer corps enables through competencies.

The Air Force is forging information needs towards a “One Air Force—one Enterprise approach. To do this, it's critical to identify and then deliver agile and flexible combat support. [356] Now, even though a picture of an end-state, the “one enterprise” concept allows a system that can change to adapt to new capabilities—thus integrating systems to achieve mission success. This is a great concept that requires the communications career field to constantly assess the environment for impact changes and apply capabilities that address the changes. This very same environmental assessment is discussed in the March 2005 Intercom magazine: “The Air Force Transformation Flight Plan describes transformation as a process by which the military achieves and maintains asymmetric advantage through changes in operational concepts, organizational structure, and/or technologies that significantly improve warfighting capabilities.” [357] For the

communications career field to be a player, it must get on board at continuously assessing its environment—to adopt a Communications Career Field Strategy. An agile, flexible strategy will allow the communications career field to stay abreast of the latest technology, mission requirements and impacts in order to align the proper capabilities to achieve mission success. Lieutenant General Hobbins, the former Deputy Chief of Staff for Warfighting Integration, conferred about staying abreast of capabilities in a February 2004 Intercom magazine article by stating: “Future conflicts will require the Air Force to employ capabilities that rapidly process time-critical information driven by an architecture that is street smart...” [358] The communications officer career field will be the ones on the front lines enabling these capabilities with officer competencies that allow its corps to develop and maintain crucial, integrated systems solutions.

Communications Mission Capability Analysis Process

The Communications Mission Capability Analysis (CMCA) is a fluid process that the CFM, in conjunction with strategy personnel and senior leadership, conducts on an as needed or annual basis to assess the environment for needed capabilities to achieve the overarching DoD and Air Force missions. The most important aspect of the CMCA process is that the communications career field look at the bigger picture by analyzing all services’ impacts and initiatives as they relate to the DoD communications strategy—most likely attained from Joint Forces Command (JFCOM) and Defense Information Systems Agency (DISA). This initiative of looking at the greater picture and integrating it into the career fields strategy was documented in the *Warfighting Integration and Chief Information Officer FY2006 Strategic Plan* in a quote from Lieutenant General Hobbins:

“As the USAF moves forward to meet the challenges of this century, SAF/XC must be on the edge of transformation and integration. Our daily efforts should be focused on our core performance outcome...a shortened kill chain through integrated & fused decision quality information.” [359] The challenges and initiatives demand that the career field look across the borders of all services and all commands for an integrated solution in supporting the warfighter. As part of the overall process to assess the environment, and to look across the services, the career field must not be satisfied with having a C4ISR Flight Plan, Transformation Plan or Joint Vision 2020—as these documents are static and represent a view from a moment in time. To bring life to these documents, the CFM must insist that senior leaders and communications strategists conduct the CMCA to uncover new capability requirements or modifications to existing capabilities.

For this paper, I conducted an analysis of the current communications environment. Albeit a small portion of this paper, the capability analysis matched up or paralleled current senior leader briefings and concept of operations. The exact wording, descriptions and focus areas may be different as this was my analysis. Also, I ask the reader to understand that this was one person, and not a team with unlimited resources or connections to myriad high-level briefings. However, in conducting this capability analysis, I reviewed senior-level SAF/XC briefings, United States Strategic Command (USSTRATCOM) briefings, JFCOM briefings, Air Force Command, Control, Intelligence, Surveillance, and Reconnaissance Center (AFC2ISRC) briefings, AFCA Intercom articles and Armed Forces Journal articles. As you go forward, remember that the CFM along with senior leadership and strategists would accomplish this tasks—

disparate from the normal strategy process, but using inputs from their counsel. This concept comes from the book, *HR as Strategic Partner*: “To achieve the necessary level of agility, HR organizations must constantly assess business needs and their own capability to support those needs. HR must determine its strategic focus based on the business imperatives facing the company.” [360] Thus, the foundation for assessing how the CFM will meet the capability needs of the Air Force is to first find out what capabilities are required—and then look at the management process and officer competencies. This is further identified in the article, *People Portfolio Management*: “Getting crystal clear on the talent you need requires a detailed analysis of your company’s strategy and answers the following questions: 1) what is your strategy that will drive results, 2) what are critical elements, and 3) what talent pools are most and least critical to achieving the strategy...” [361]

Once the CFM and senior team compiled and reviewed myriad documents, articles and briefings, it’s time for the team to discuss categorization and distinguish the difference between environmental drivers or thrust areas and the capabilities required to accomplish or achieve the mission areas. This is a formative and arduous process that takes dedication to getting it right and then comparing it against the currently-identified mission areas and capabilities in order to depict differences or gaps. At this point, the CFM and team are looking for gaps in capabilities so they can document and brief the top leadership on their findings and conclusions. A crucial, yet excruciating step in the process is to compare the environmental findings against current communications officer position categorizations to see if there are congruencies between the CFM’s analysis and

the current missions that the 4000-plus officer positions support in the field. Currently, the communications career field does not have the 4000-plus positions outlined and stored according to mission areas, capabilities, competencies—or for that matter in any format so leadership could derive focus areas. Nonetheless, I believe this analysis is a start to demonstrate the required process to identify communications mission capabilities required to achieve DoD mission areas. As a result of the analysis, five communications mission capabilities were identified: C4ISR, Business Operations, Netcentric Operations, Expeditionary Operations, and Garrison Operations. Figure 16 shows the five capabilities.

C4ISR Capability:

According to a February 2005 Intercom magazine article, the Air Force invests over 10 billion dollars in C4ISR

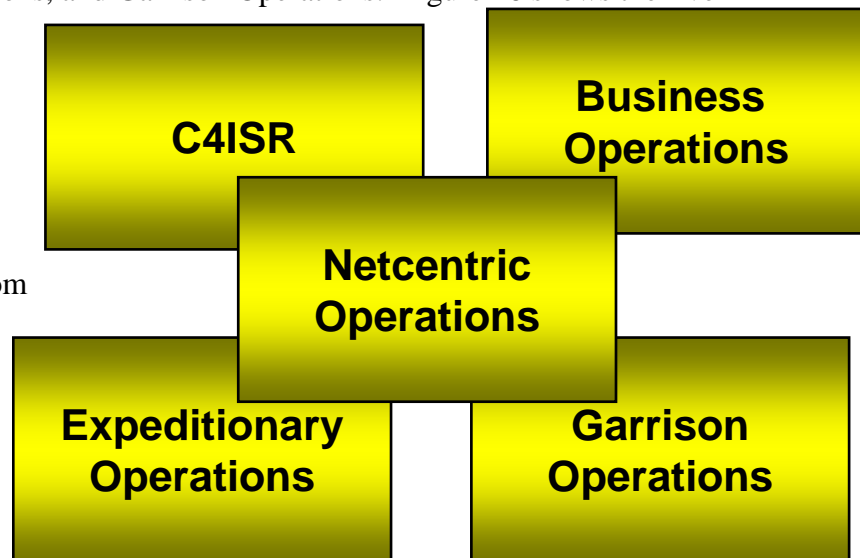


Figure 16. Communications Mission Capabilities

systems annually to meet joint warfighting needs. [362] To be credible and astute at fielding C4ISR systems, the Air Force needs to have the capability to procure, sustain, integrate and operate C4ISR systems. The systems include space and missile systems, AOC systems, airborne systems, special operations systems, satellite systems, theater systems and any other systems interconnected to provide the warfighter with sensor-to-shooter capabilities. In order to integrate systems and make them seamless, military

officers must be able to enable capabilities that foster innovation and creativity in fielding such systems. It also takes fielding of plans such as the C2&ISR Flight Plan and the C4ISR Architecture Management Plan. Finally, it takes military officers who have the competencies to enable capabilities to integrate C4ISR systems into the Global Information Grid (GIG). The officers must have knowledge and experience in the GIG's operation and engineering principles—taking the force from a stove-piped environment and making it capabilities-based, net-centric environment. The 2006 QDR, on page 55 discusses this transformation by alluding to the fact that ISR capabilities will no longer be platform centric, but based off of the capabilities required by the warfighter. Furthermore, it discusses the integration of systems to provide information to the warfighter on a timely and accurate basis. [363]

Business Operations Capability: The DoD has "...4,200 business systems, for which the department received approximately 13.3 billion dollars in fiscal year 2005 for operations, maintenance, and modernization. For fiscal year 2006, DoD received approximately 15.5 billion dollars to operate, maintain, and modernize its business systems." [364] This is an extreme amount of money and deserves the proper amount of emphasis—so the Air Force must enable capabilities through officer competencies to accomplish fielding of business operations systems. The Air Force, in an October 2005 Intercom article, proclaimed that information [business systems] is as important as the warfighting systems and that the Air Force needs to be responsible for its sustainment. It further states that its mission is to integrate the business systems into a single enterprise. [365] To do this integration task, it takes competent officers who enable the operations

capabilities to build, integrate, sustain and modernize business systems applications. Mr. Gilligan, the former Air Force CIO, exclaimed in a February 2004 Intercom article, that information [from business systems] should be managed in the same manner similar to capabilities of C4ISR systems. [366] As the former CIO exclaimed, if information is to be managed accordingly, then the Air Force should field a capability that achieves business [information] operations.

Network Centric Operations Capability: The Network Centric Operations capability provides commanders fused information about the battlespace—at the end of their finger tips. A February 2003 Intercom article proclaims:

The Air Force must have a globally-based command and control system to provide commanders information and allow them to direct forces and apply our wide array of capabilities to the joint battlespace. This Global.net, an integrated network—air, space, and ground – allowing, wherever possible, machine-to-machine exchange of information is intended to provide commanders the right information, at the right time in a form that is easy to understand for rapid decision-making. [367]

To achieve such effects and integration, leadership must nurture capabilities to accomplish the various tasks. This takes enabling the capability through deliberate officer competencies in the areas of netcentric operations, C4I systems, air operations systems, space and missile systems and a host of other competencies that ensure the Air Force has the Network Centric Operations capability. This also involves the competencies to protect and defend the network against malicious invaders and enemies who wish to disable and disintegrate our strategic netcentric advantage. Finally, this capability takes full knowledge and understanding of the GIG. The 2006 *QDR* stated: “The foundation for net-centric operations is the Global Information Grid (GIG), a

globally interconnected, end-to-end set of trusted and protected information networks. The GIG optimizes the processes for collecting, processing, storing, disseminating, managing and sharing information...” [368] This is the capability that the Air Force must enable through officer competencies.

Expeditionary Operations Capability: The 2006 QDR stated “Mobility capabilities will be fully integrated across geographic theaters and between warfighting components and force providers, with response times measured in hours and days rather than weeks. They will enable the Department’s move from a large institutional force to a future force that concentrates more operational capabilities at the front line.” [369] With the thrust or focus of future Air Force structure to largely be based on expeditionary forces, it’s paramount to have a capability that achieves this focus or vision. This capability allows the Air Force to achieve desired results in operations extending from desolate locations, mobile bases, expeditionary force planning, theater planning to humanitarian assistance operations. To enable this capability, the Air Force communications leadership must focus officer competencies that enable the expeditionary operations capability. For instance, it should place officers in combat communications units, special operations units, and air support units to grow their skills in these areas. Only then, can senior leadership move them to other competency pools to further expand their skills base and make them more productive and valuable to the warfighting commanders.

Garrison Operations Capability: If you read the current briefings on future communications force structure, they state “expeditionary, expeditionary, expeditionary!” However, you can only get so expeditionary before you start becoming an in-garrison

operation—demonstrating some resemblance of a base operations infrastructure. The foundation for expeditionary operations starts with understanding the basics for base-level or garrison operations. These include concepts for base infrastructure, circuit routing, voice and data systems, as well as planning support and administrative services. This is the life-blood of growing communications officers, and I fear that we'll lose our roots if we totally ignore not only base infrastructure but how to operate within building complexes such as seen at AFIT and other self-sustaining organizations. Bottom line is that communications leadership cannot only brief these technological concepts at schools and in electronic media, but must let junior officers experience the concepts in action at base-level. If not, then leadership is destroying the foundation of the career field and one that supports expeditionary operations capabilities. Thus, garrison operation is a fundamental capability that supports the garrison operations capability and allows junior officers to grow those competencies that form the foundation of their careers.

Conclusion

What you've just read is a synopsis of the first step or phase of the potential communications officer career field strategy. In today's rapidly changing environment, leadership cannot wait for a crisis, or budget cuts, congressional mandates, or program decisions to make tactical cuts in manpower and resources. Leadership must be on the sword's edge in comprehending and analyzing its environment in order to make strategic moves to capitalize on opportunities and mitigate threats. A passage from the book, *Competing for the Future* encapsulates this theme:

A strategic architecture identifies what we must be doing right now to

intercept the future. A strategic architecture is the essential link between today and tomorrow, between short term and long term. It shows the organization what competencies it must begin building right now, what new customer groups it must begin to understand right now, what new channels it should be exploring right now, what new developmental priorities it should be pursuing right now to intercept the future. [370]

This passage explores the concept of a strategy that allows organizations, through good times and bad times, to analyze and assess its environments—in order to make decisions based upon substantial facts. In doing so, planners, and in our case, military leaders make better, well-aligned decisions that support future mission initiatives. Additionally, a future strategy includes the type of competencies that we'll expect out of our employees to achieve mission success. And it's these competencies that enable the communications mission capabilities—allowing Air Force communications officers to grow and acquire the skills to succeed and prosper in the Air Force of the future. In this paper, I've drafted mission capabilities that tie into Air Force operations. The next section will introduce the reader to communications competencies that officers acquire during work assignments—helping them to grow and develop certain “deeper” competencies.

VIII. Communications Competency Analysis

The CFM and staff conduct a Communications Competency Analysis (CCA) following the CMCA to align critical career field competencies to capabilities. The career field officers acquire or build the competencies which allow them to better serve leadership in communications officer positions. By acquiring or building the competencies, officers are able to bring to bear key mission capabilities that when realized, accomplish the communications piece of Air Force mission areas. As referenced in section 6, the GAO stated organizations needed to determine competencies that were critical to success—especially during times of rapid change and limited resources. The same pertains to the communications officer career field as the numbers of its officers draw down and the work load multiplies—the officers will need to have competencies in myriad areas to sustain operational effectiveness.

Communications Competency Analysis Purpose

Why a CCA and what does it provide the communications officer career field? The CCA helps leadership uncover critical competencies that enable mission capabilities. The competencies are structured at both the tactical and operational level so officers can track their growth opportunities. The growth opportunities are linked to position descriptions and then to various level agencies so leadership can form career paths for officers—as they grow, develop, and achieve mission goals. In the *Roadmap to Strategic HR*, the author stated “In order to develop talent, we first need to be very clear in describing the individual competencies that we need to develop.” [371] This is important because leadership must deliberately grow officers to meet current mission objectives as

well as future mission strategy. The communications leadership deliberately grows its officers by first laying the foundation or blueprint for what is required by conducting a CMCA. Then, leadership identifies those competencies that enable the capabilities—and construct the competencies to be used as building blocks for career field officers. The concept is shown in figure 17 and also depicted in full, in Appendix B. Only at this point can leadership construct the paths for success and rich careers where the career field deliberately grows its officers. Moreover, the CFM and leadership can build algorithms

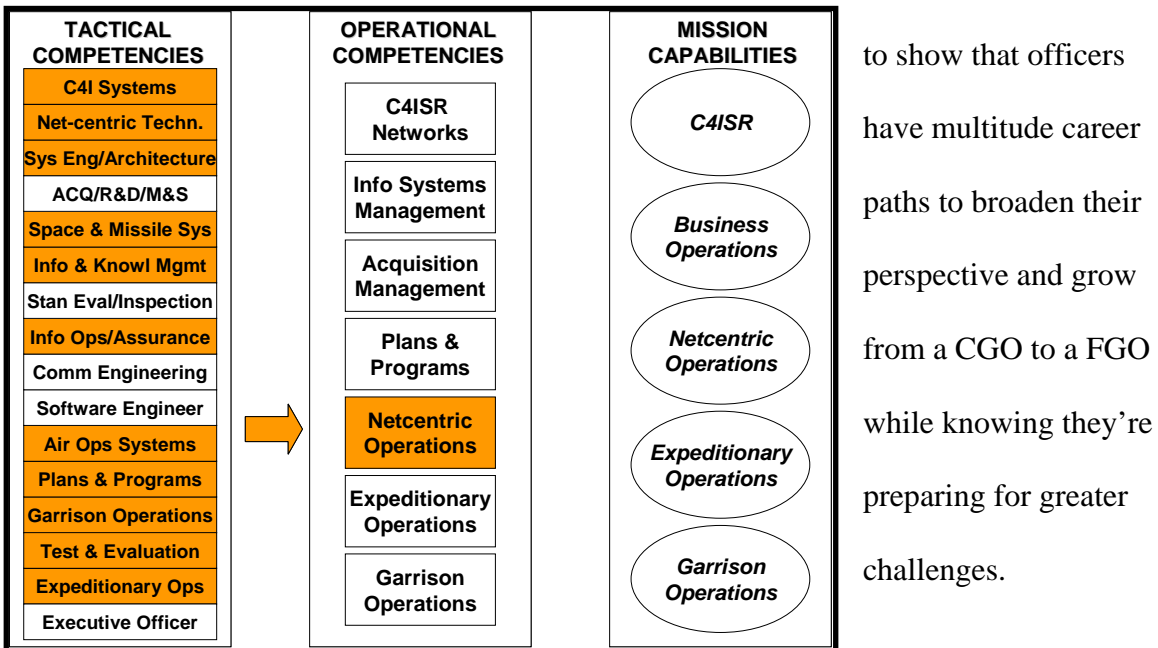


Figure 17. Competency Map to Capabilities

The concept of growing an officer and developing his or her talent is central to documenting career field competencies. Also, the fact that when a career field has stock of their competencies and those officers who possess respective competencies, it allows leadership to strategically place officers in positions that achieve mission objectives. Thus, as officers gain competencies, they become more talented and more able to meet career field challenges. *The Workforce Scorecard* mentioned “Great talent in critical

positions is a source of a firm's competitive advantage and, if not present, an obstacle to strategy execution.” [372] Therefore, officers with talent or competencies drive the military's competitive advantage which enables capabilities and mission success.

The Air Force's Space Cadre has tackled this concept and has set up 11 categories of space experience. In a more logical sense, these categories could be called competencies, such as space control, satellite systems, missile systems, etc. The space leadership assesses and assigns the space professionals to categories based off of education and experience. Furthermore, space leadership assigns the personnel to one of three certification levels according to depth of their space experience. According to the GAO, this is a deliberate process, one that institutes human resource strategy to manage a career field resource—and systematically tracks and grows its individuals. [373] The question is, in such a diversified officer career field as communications, why doesn't leadership have a deliberate and systematic program to manage its 4000-plus officers. In a March 2005 Intercom magazine article, Colonel Cotton, AFSOC/A6 surmises that the Air Force must develop Airmen who are operations focused and can apply their skills to deliver decisive combat capabilities. [374] I would think that if this were the case, then the communications career field would at least have an accounting of its competencies in order to align its resources to mission capabilities. It's not the case as the communications officer career field does not have a program, process, procedure or means to account for its skill sets, competencies or level of proficiency within its ranks. However, the Space community is paving the way and the communications officer career field has an opportunity to benchmark the premises of the Space program and further

develop the research in this paper to implement its own career field program. It can be done using the Communications Officer Career Field Strategy and aligning resources accordingly to support the effort.

“The communications field comprises many different technical skills. Responsibilities can vary from conducting offensive or defensive warfighting information operations, to managing systems networks, to programming computers, to managing visual information needs at the Air Staff.” [375] The communications officer career field is a varied field and diligence must be taken not to stovepipe officers into career tracks where they don’t broaden. Currently, there is no system that deliberately grows officers to strategically develop their competencies in order to achieve a wide range of communications tasks. A November 2005 Intercom article by Colonel Spano, the USAFE/A6, discussed the need for communications officers to be broadened to meet future career field challenges when he stated:

The new communications professionals will need a greater depth and breadth of technical knowledge than they have today, but they will apply it in a much different way. These new professionals will need a much broader understanding of how systems, architectures and applications function to meet the information demands of the organizations they service. [376]

In order for the career field to meet Col Spano’s intent, leadership must implement a program to deliberately grow and manage its resources. The Communications Officer Force Development Program and one of its key components, the Communications Officer Career Field Strategy provide leadership with a blueprint to develop and manage competencies as well as its officer corps. In the article, Building a Better Workforce, it discussed how IBM builds profiles on every one of its employees based off of

institutional competencies and skills that allows the company to assess its human resources. This ability allows IBM leadership to forecast employee development, assess skills gaps and rotate talent into positions based upon external environmental analysis—much the way I recommend in this paper. [377]

I believe at this point, the reader should have a good understanding on why it's important to implement a force development program and its components to include an analysis of its environment. It's crucial to understand at this point that whether the political environment changes, the military establishment changes, or economics changes—no matter the size or scope of the military, that this process expands or contracts to properly assess the mission capabilities. And no matter the modifications, additions or deletions of mission capabilities, the competency analysis still maps required competencies to stated capabilities. The ability of the Communications Career Field Strategy to adapt to any situation makes it an agile and flexible model and should prevent leadership from outsourcing strategy development in the future. This is the fundamental premise behind the process within this strategy is that leadership should constantly evaluate the environment and adjust capabilities and competencies accordingly.

As the CFM and leadership set competencies for the tactical and operational level officers, it allows the career field team and officers to gauge current officer profiles against prospective career paths based upon future positions, education and training, and experience level. This allows the career field team to look at the many competency options for each officer and for the career field as a whole—in assuring that capability and competency gaps are mitigated and that there's sufficient competency coverage for

all officer positions to include redundant coverage. It also affords the officer an opportunity to map out career goals, options, and educational and training courses—as to have more control over their careers. Furthermore, the overall benefit is highlighted by Intralearn:

When Skills Management [competency management] is implemented with strong top-management commitment, the staff receives strong messages concerning their competencies and their personal value as individual contributors. When competencies are openly cataloged, people set out to upgrade their abilities, resulting in a more-talented, more-productive staff. [378]

Once the organization has competencies outlined, the employees or in our case, the officers become more engaged in their career because they have insight into the process and possibilities. In the article, Talent Pools: The Best and the Rest, it stressed the importance of competencies by stating “Talent pools [competencies] allow development as possible candidates for a variety of positions, providing flexibility to both the individual and the organization.” [379]

The officer competencies consist of knowledge, skills, and abilities. Basically, one competency is a conglomeration of attributes that delineate it from other competencies. Figure 18 depicts a

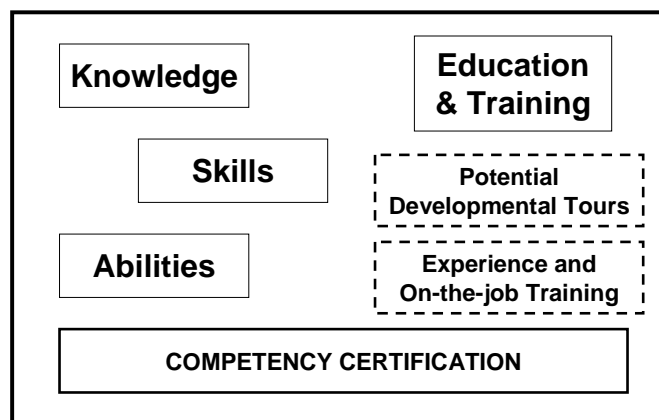


Figure 18. Competency Composition

competency structure. According to the *Strategic Staffing Guidebook*, a competency is “A combination of skills, knowledge, performance behaviors, and personal attributes that contribute to improved employee performance and organizational success.” [380] In

developing competencies, the officer encounters education and training, certification, experience or competency ratings and potential developmental tours. These opportunities and experiences allow the officer to develop and grow the knowledge, skills, and abilities that comprise the competencies. The career field measures the experience factor according to competency and skill ratings or levels as seen in section 6—for job positions. As officers gain experience in respective competency pools, they gain ratings according to their proficiency levels. Furthermore, competencies share knowledge, myriad skills and abilities among themselves—allowing officers to become qualified to perform at a quicker pace because of the shared attributes. And as officers gain competencies, they become more valuable to the institution because they move into new positions and perform immediately—negating additional training costs, time and resources spent to get officers up-to-speed in new positions. As a final point, leadership should look at assigning communications officers to developmental tours, allowing them to broaden into related, yet distinct career fields. This affords a win-win situation where the officer still acquires career field competencies and teaches their personnel in their new career field and unit about communications. In the same regard, the unit and its personnel teach the communications officer about their career field, broadening the officer to be a better-rounded officer as he or she progresses up the ranks.

The competencies, their attributes and their development mechanisms (training, education, experience, and developmental tours) enable the mission capabilities as stated earlier. When the career field enables capabilities, such as C4ISR expertise, Business Operations expertise and Netcentric Operations expertise, the communications officers

achieve mission objectives, goals, and strategies for the greater Air Force and DoD. In examining the capabilities highlighted in section 7, it's negligent at this day-and-age to think that the current communications force development does not link competency development to those capabilities, or even track what capabilities are required of its military officers. If I've done anything to foster critical thinking and to some extent scrutiny, I hope that it's to get leadership thinking about deliberate and systematic officer development using competencies and capabilities as cornerstones of the force development program. With any luck, leadership will align resources to further study this force development program concept and implement the foundational elements to build the communications officer force development program. This force development concept and its execution are far too important as military officers and those they lead, execute challenging missions every day—bringing to life Air Force core competencies, Joint Vision 2020, the Air Force Transformation Flight Plan, among other strategies.

Competencies Map to Communications Mission Capabilities

“The future force will place a premium on capabilities that are responsive and survivable.” [381] This quote was taken from the 2006 *QDR* in the context that advanced capabilities will give the U.S. military a competitive advantage over enemies—as the military will exploit capabilities when and where needed. This is based on the premise that U.S. forces are the best trained, most efficient warfighters in the world. How does a force get to that stature? The GAO, in the December 2003 report proclaims that agencies must identify its critical competencies and underlying skills that it requires to meet future warfighting needs. [382] Similarly, leadership builds a force that matches those critical

competencies—the knowledge, skills and abilities of personnel who enable warfighting capabilities. Once leadership identified its required competencies and skills, they consult senior leadership to approve the capabilities and competencies before they move on into the strategy execution.

As the military and more importantly the communications career field engrain competencies as an enabler of career field capabilities, it requires support from senior leadership. In the FY2006 SAF/XC Strategic Plan, the plan exclaimed “SAF/XC will develop a career management plan that incorporates those skills and experience required in SAF/XC to accomplish key objectives of warfighting and operational support integration.” [383] This means that there are pockets of professionals within SAF/XC that are thinking about managing the workforce according to skills or competencies. Furthermore, as this catches momentum, it’s my hope that leadership mandates the implementation of a Communications Officer Force Development Program with adequate authority and responsibility to make and sustain change. According to AFDD 1-1, acquiring, structuring, accounting for and growing competencies take time. Competencies require depth of experience, education and training and developmental tours to structure the competencies and then to offer applicability to officer mission requirements. [384]

As officers move from position to position, they amass competencies that start to define their career composition. According to RAND in a 2004 report on senior leader background, most positions require multiple competencies—as officers will acquire more than one competency and will grow and develop more rapidly in the position. [385] This

allows communications senior leadership to define positions with multiple competencies and deliberately grow specific officers to gain greater skills in managing their career paths. This is comparable to what IBM does with their Workforce Management Initiative—allowing their leadership to strategically move their employees to jobs where their additional competencies can be used to leverage company growth and success.

[3865] And as IBM’s employees, as well as the communications officers develop and work many jobs, their knowledge base grows and they become more valuable in enabling key capabilities that produce competitive advantages for their organization. As a result of developing officers according to competencies, they have the genetic makeup to prosper in future positions as they enter those positions with greater aptitude and ability to perform. The book, *HR Value Proposition* cites “Having talented employees occurs when each employee knows what is required for both current and future work and is able to identify specific knowledge, skills, and behaviors required to meet customer demands.” [387]

Communications Competency Analysis Process

At this point in the Communications Career Field Strategy execution, the CFM and staff have accomplished the CMCA. The previous pages in this section explained why it’s so important to accomplish a CCA and how it maps to the capabilities defined in the CMCA. Now, it’s time to define the tactical and operational-level competencies that enable the capabilities as well as provide communications officers with potential career opportunities. The *HR Value Proposition* proclaims:

Developing talent means going beyond platitudes like ‘people are our

most important asset' to investing time and hard resources in making sure that employees are both competent and committed. Competent employees have the skills they need for today and tomorrow. Committed employees deploy those skills regularly and predictably. [388]

The investment in growing and developing officer competency begins with identifying the career field competencies and then ensuring they enable the capabilities to accomplish mission objectives. This effort includes reviewing briefings, articles, journals, concept of operations and listening to senior leaders in order to find out the focus and mission thrusts—those mission areas that require communications capabilities. Then, the CFM and staff define what communications competencies are required to realize the mission capabilities. At the outset of evolving the CCA, it's more an art than science as there's no specific method or path to take in identifying the competencies—though they must map to and enable the capabilities.

I envision the CFM and staff taking account of all communications officer positions and categorizing them according to the capability or capabilities they produce. I also see the CFM, staff and FAMs drilling down into each position and identifying the competency or competencies required for the positions. Moreover, I envision this group of personnel drilling even further to define the knowledge, skills, abilities, and education and training required by each position. After base lining the positions, the CFM, staff and AFPC would catalog the positions in a data base—allowing easy access, modifications or updates to the position information. In the data base, all positions would be categorized by tactical and operational competencies and then by level and type of agency so leadership can properly assign officers to the respective competency and then to agency type and level. During this arduous task, the CFM and staff would also

validate and audit the positions against the capabilities and competencies to uncover any gaps—as to validate both the CMCA and CCA processes.

At the same time, the staff will outline all competencies identified and correlated to the mission capabilities. This includes identifying the knowledge, skills and abilities discussed earlier in this section. It also includes clarifying all education, training, experience levels, certification requirements, and potential developmental tours available to deepen, and or broaden the officers. At this point, the staff would have all the tactical and operational competencies identified and outlined as well as the mission capabilities. Now, it's crucial that the staff build notional mappings between the tactical and operational competencies—showing potential career field paths and then mapping them to mission capabilities. In the current communications officer force development process, officers are placed in positions based upon agency level and jobs held in the past. In this new force development program, the DT, CFM, or assignment team will place officers in positions based upon competency development, ratings, and its match to officer positions. Hence, the career field deliberately builds officers to develop according to competencies which enable the mission capabilities. And under this program, once officers reach the strategic level, they are well-rounded officers with the depth and breadth of experience to perform their strategic-level responsibilities with great success. As compared with the ad hoc method of growing officers in today's Air Force, under this program, leadership will have many career path “maps” to use in developing its officers.

Communications Competencies

There are three levels of competencies within the communications career field pyramid—the tactical, operational, and strategic level. These are depicted in the new career field pyramid, figure 14, in section 6 and showed here again. In order for an officer to become a tactical-level officer, they had to have attended the expeditionary officers training course and have a basic understanding of the communications career field. This is the foundation

of the career field pyramid

and is supported by

communications aptitude and

initial career field and officer

training. Once a tactical-level

officer, they're expected to

have at least three assignments

to deepen their understanding in

tactical-level communications. The positions and competencies are broken out as to

scope their responsibilities and develop their knowledge, skills, and abilities. Here is

where leadership develops the officers according to myriad career paths based upon

competencies and then upon type and level of agency. Once the officer attains field

grade officer status, they become an operational officer with the intent of serving at a

broader-based level. Communications officers are expected to have a sound foundation

in many competencies with associated certifications and are put in positions that will



grow them as future strategic-level officers. At this level, officers are still required to serve in broader competencies and are required to complete their respective competency certifications. If all works as planned, once the officers attain Colonel status, the officers are well-developed with both tactical and operational-level experience—that bodes them well in their policy and leadership positions.

The competencies compositions are such that some knowledge, skills, and abilities are unique to very few competencies. Most competencies share these attributes with other competencies so officers who are developing knowledge, skills, and abilities in one competency are also developing in others. Consequently, leadership has officers who are continuously growing—allowing for easy assignments to various positions where the officers are qualified to serve in many different competencies and still perform at a high level of proficiency. This is a much more deliberate process than the one used today—where organizations don't know what type of officer or even if the officer is competent to serve in the position—upon assignment. Then it puts the organization and officer in a difficult situation where it's a lose-lose proposition for both parties. The new force development program deliberately grows officers and matches them to assignments where they are competent and have demonstrated the potential to perform at more difficult assignments. In preparing for these difficult assignments, leadership will mandate that officers embrace the developmental rigors associated with each competency—to include various education and training opportunities, developmental tours, and certification courses. Unlike today's process where we don't have a way of systematically growing communications officers, the new program will deliberately

develop, grow, and track officer development within, as well as among the various competencies and levels of development. As officers develop, grow, and attain competency certifications associated with their positions, they gain a wealth of experience that allows them to move into new positions, requiring them to attain other competencies. Finally, as the officers move up in rank, they are a conglomerate of competencies with associated experiences that allows them to perform at higher operational and strategic-levels of responsibilities. As a result, communications leadership has deliberately developed its officers.

Tactical-level competencies are those competencies that junior officers must attain to become well-rounded officers. The intent is not to have the junior officers work the enlisted-level tasks, but be able to develop a conceptual understanding of how tactical-level duties are performed and develop an understanding of how tasks support the mission capabilities. At this level, junior officers will acquire the knowledge, skills, and abilities to function at the face-to-face level with subordinates—tying current tasks to the grander communications mission and planning for future operations. Leadership expects the officers to attend educational and training courses, accomplish certification courses and gain experience in their respective competencies. Tactical-level officers are not expected to know or have attained certifications in all competencies—however with common skills, all officers will have a foundation in tactical-level operations that will make them of greater value when they reach field grade officer status. The tactical-level competency composition is located in Appendix A, and it should be noted that these are dynamic—as they should constantly be re-evaluated according to the CCA process. The

following are the 16 tactical-level competencies as depicted in the new career field pyramid:

Garrison Operations: The officer has the knowledge, skills, and abilities to perform base-level communications operations, maintenance, plans and programs, administrative duties, contract management, and base-level infrastructure planning. In addition, the officer can perform communications duties for geographically separated units, schoolhouses, off-base business complexes and other facilities that integrate with a base-level communications unit. To become competent in garrison operations, the officer is expected to have a communications foundation or background, with an undergraduate or a master's degree in a computer or communications related field of study. The officer will attend both mandatory and voluntary training courses based upon their unit's mission and resource allocation, and will either attend or complete electronically a mandatory certification course. Based upon certification requirements and course completion, the officer's supervisor and/or senior communications officer can sign off on the competency and fully certify the officer. Accordingly, in keeping with the total force concept, the CFM, FAMs, and senior leadership may select the officer for a developmental tour in a Contracting Squadron, Comptroller Squadron (Budget), Operational Support Squadron (Command Post), Maintenance Squadron, or Logistics Readiness Squadron (Logistics Planner). Albeit outside the communications scope, the officer will be expected to learn their new craft as well as stay current in garrison operations—to include completing training courses and the certification course.

Net-centric Technology: The officer has the knowledge, skills, and abilities to perform circuit management, global information grid architecture planning, information assurance management, frequency and spectrum management, satellite architecture management, airborne operations architecture management, and systems engineering and warfighting systems integration. To become competent in net-centric technology, the officer is expected to have a communications foundation or background, with an undergraduate or a master's degree in a computer or communications related field of study. The officer will attend both mandatory and voluntary training courses based upon their unit's mission and resource allocation, and will either attend or complete electronically a mandatory certification course. Based upon certification requirements and course completion, the officer's supervisor and/or senior communications officer can sign off on the competency and fully certify the officer. Accordingly, in keeping with the total force concept, the CFM, FAMs, and senior leadership may select the officer for a developmental tour in a System Program Office, Air Force Research Lab, or a Space Operations unit. Albeit outside the communications scope, the officer will be expected to learn their new craft as well as stay current in net-centric technology—to include completing training courses and the certification course.

C4I Systems: The officer has the knowledge, skills, and abilities to perform C4I systems project management, engineering and integration tasks, accreditation and certification, systems engineering and architecture management, contract management, and acquisition process management. To become competent in C4I systems, the officer is expected to have a communications foundation or background, with an undergraduate

or a master's degree in a computer or communications related field of study. The officer will attend both mandatory and voluntary training courses based upon their unit's mission and resource allocation, and will either attend or complete electronically a mandatory certification course. Based upon certification requirements and course completion, the officer's supervisor and/or senior communications officer can sign off on the competency and fully certify the officer. Accordingly, in keeping with the total force concept, the CFM, FAMs, and senior leadership may select the officer for a developmental tour in a Systems Program Office, Air Force Research Lab, Intelligence unit, or in a Space Operations unit. Albeit outside the communications scope, the officer will be expected to learn their new craft as well as stay current in C4I systems—to include completing training courses and the certification course.

Test and Evaluation: The officer has the knowledge, skills, and abilities to perform test engineering management, test data analysis, system risk management, test techniques and guidance; systems project management, accreditation and certification, and acquisition process management. To become competent in test and evaluation, the officer is expected to have a communications foundation or background, with an undergraduate or a master's degree in a computer or communications related field of study. The officer will attend both mandatory and voluntary training courses based upon their unit's mission and resource allocation, and will either attend or complete electronically a mandatory certification course. Based upon certification requirements and course completion, the officer's supervisor and/or senior communications officer can sign off on the competency and fully certify the officer. Accordingly, in keeping with the

total force concept, the CFM, FAMs, and senior leadership may select the officer for a developmental tour in a System Program Office, Air Force Research Lab, Intelligence unit, or a Space Operations unit. Albeit outside the communications scope, the officer will be expected to learn their new craft as well as stay current in test and evaluation—to include completing training courses and the certification course.

Systems Engineering and Architecture: The officer has the knowledge, skills, and abilities to perform systems engineering functions, engineering and integration tasks, architecture management, requirements analysis, accreditation and certification, contractor program management, and acquisition process management. To become competent in systems engineering and architecture, the officer is expected to have a communications foundation or background, with an undergraduate or a master's degree in a computer or communications related field of study. The officer will attend both mandatory and voluntary training courses based upon their unit's mission and resource allocation, and will either attend or complete electronically a mandatory certification course. Based upon certification requirements and course completion, the officer's supervisor and/or senior communications officer can sign off on the competency and fully certify the officer. Accordingly, in keeping with the total force concept, the CFM, FAMs, and senior leadership may select the officer for a developmental tour in a Systems Program Office, Air Force Research Lab, Intelligence unit, or a Space Operations unit. Albeit outside the communications scope, the officer will be expected to learn their new craft as well as stay current in systems engineering and architecture—to include completing training courses and the certification course.

Acquisition, Research and Development, and Modeling and Simulation: The officer has the knowledge, skills, and abilities to perform contractor program management, contract development and modification, acquisition process management, systems engineering and architecture, systems program management, cost analysis, research and development, and modeling and simulation. To become competent in acquisition, research and development, and modeling and simulation, the officer is expected to have a communications foundation or background, with an undergraduate or a master's degree in a computer or communications related field of study. The officer will attend both mandatory and voluntary training courses based upon their unit's mission and resource allocation, and will either attend or complete electronically a mandatory certification course. Based upon certification requirements and course completion, the officer's supervisor and/or senior communications officer can sign off on the competency and fully certify the officer. Accordingly, in keeping with the total force concept, the CFM, FAMs, and senior leadership may select the officer for a developmental tour in a System Program Office, Air Force Research Lab, Intelligence unit, or a Space Operations unit. Albeit outside the communications scope, the officer will be expected to learn their new craft as well as stay current in acquisition, research and development, and modeling and simulation—to include completing training courses and the certification course.

Space and Missile Systems: The officer has the knowledge, skills, and abilities to perform satellite systems management, space operations systems management, missile communications systems management, systems engineering, contract program management, acquisition process management, and engineering and integration tasks. To

become competent in space and missile systems, the officer is expected to have a communications foundation or background, with an undergraduate or a master's degree in a computer or communications related field of study. The officer will attend both mandatory and voluntary training courses based upon their unit's mission and resource allocation, and will either attend or complete electronically a mandatory certification course. Based upon certification requirements and course completion, the officer's supervisor and/or senior communications officer can sign off on the competency and fully certify the officer. Accordingly, in keeping with the total force concept, the CFM, FAMs, and senior leadership may select the officer for a developmental tour in a Systems Program Office, Air Force Research Lab, or a Space Operations unit. Albeit outside the communications scope, the officer will be expected to learn their new craft as well as stay current in space and missile systems—to include completing training courses and the certification course.

Expeditionary Operations: The officer has the knowledge, skills, and abilities to perform contingency planning, deployment and mobility management, network management, maintenance management, systems project management, information assurance, and engineering and integration tasks. To become competent in expeditionary operations, the officer is expected to have a communications foundation or background, with an undergraduate or a master's degree in a computer or communications related field of study. The officer will attend both mandatory and voluntary training courses based upon their unit's mission and resource allocation, and will either attend or complete electronically a mandatory certification course. Based upon certification requirements

and course completion, the officer's supervisor and/or senior communications officer can sign off on the competency and fully certify the officer. Accordingly, in keeping with the total force concept, the CFM, FAMs, and senior leadership may select the officer for a developmental tour in a System Program Office, Air Force Research Lab, Space Operations Unit, or a Logistics Readiness Squadron (Logistics Planner). Albeit outside the communications scope, the officer will be expected to learn their new craft as well as stay current in expeditionary operations—to include completing training courses and the certification course.

Information and Knowledge Management: The officer has the knowledge, skills, and abilities to perform process reengineering and management, knowledge management activities, knowledge engineering activities, database management, systems project management, engineering and integration tasks, requirements analysis, contractor program management, and portal management. To become competent in information and knowledge management, the officer is expected to have a communications foundation or background, with an undergraduate or a master's degree in a computer or communications related field of study. The officer will attend both mandatory and voluntary training courses based upon their unit's mission and resource allocation, and will either attend or complete electronically a mandatory certification course. Based upon certification requirements and course completion, the officer's supervisor and/or senior communications officer can sign off on the competency and fully certify the officer. Accordingly, in keeping with the total force concept, the CFM, FAMs, and senior leadership may select the officer for a developmental tour in a System Program

Office, Intelligence unit, or a Space Operations unit. Albeit outside the communications scope, the officer will be expected to learn their new craft as well as stay current in information and knowledge management—to include completing training courses and the certification course.

Standards Evaluation and Inspections: The officer has the knowledge, skills, and abilities to perform inspector duties, scenario development and management, contingency management, standards evaluation functions, contract surveillance and management, and systems integration and architecture functions...to name a few. To become competent in standards evaluation and inspections, the officer is expected to have a communications foundation or background, with an undergraduate or a master's degree in a computer or communications related field of study. The officer will attend both mandatory and voluntary training courses based upon their unit's mission and resource allocation, and will either attend or complete electronically a mandatory certification course. Based upon certification requirements and course completion, the officer's supervisor and/or senior communications officer can sign off on the competency and fully certify the officer.

Information Operations and Assurance: The officer has the knowledge, skills, and abilities to perform information assurance management, information operations tactics, network and system defense, global information grid circuit management, architecture project management, and network management. To become competent in information operations and assurance, the officer is expected to have a communications foundation or background, with an undergraduate or a master's degree in a computer or

communications related field of study. The officer will attend both mandatory and voluntary training courses based upon their unit's mission and resource allocation, and will either attend or complete electronically a mandatory certification course. Based upon certification requirements and course completion, the officer's supervisor and/or senior communications officer can sign off on the competency and fully certify the officer. Accordingly, in keeping with the total force concept, the CFM, FAMs, and senior leadership may select the officer for a developmental tour in a Cyberspace coded position, Information Operations coded position, System Program Office, Space Operations unit, or an Intelligence unit. Albeit outside the communications scope, the officer will be expected to learn their new craft as well as stay current in information operations and assurance—to include completing training courses and the certification course.

Communications Engineering: The officer has the knowledge, skills, and abilities to perform engineering and installation, systems engineering and architecture, requirements analysis, acquisition process management, system project management, global information grid management, and base-level architecture. To become competent in communications engineering, the officer is expected to have a communications foundation or background, with an undergraduate or a master's degree in a computers, communications, or engineering related field of study. The officer will attend both mandatory and voluntary training courses based upon their unit's mission and resource allocation, and will either attend or complete electronically a mandatory certification course. Based upon certification requirements and course completion, the officer's

supervisor and/or senior communications officer can sign off on the competency and fully certify the officer. Accordingly, in keeping with the total force concept, the CFM, FAMs, and senior leadership may select the officer for a developmental tour in a System Program Office, Air Force Research Lab, or at DARPA. Albeit outside the communications scope, the officer will be expected to learn their new craft as well as stay current in communications engineering—to include completing training courses and the certification course.

Software Engineering: The officer has the knowledge, skills, and abilities to perform software engineering management, object oriented analysis and design, accreditation and certification, contractor program management, requirements analysis, systems project management, engineering and integration, and process reengineering and management. To become competent in software engineering, the officer is expected to have a communications foundation or background, with an undergraduate or a master's degree in a computer or communications related field of study. The officer will attend both mandatory and voluntary training courses based upon their unit's mission and resource allocation, and will either attend or complete electronically a mandatory certification course. Based upon certification requirements and course completion, the officer's supervisor and/or senior communications officer can sign off on the competency and fully certify the officer. Accordingly, in keeping with the total force concept, the CFM, FAMs, and senior leadership may select the officer for a developmental tour in a System Program Office, Intelligence unit, or a Space Operations unit. Albeit outside the communications scope, the officer will be expected to learn their new craft as well as stay

current in software engineering—to include completing training courses and the certification course.

Air Operations Systems Management: The officer has the knowledge, skills, and abilities to perform air operations center management, aircraft systems management, architecture management, engineering and installation, systems engineering, contractor program management, and acquisition process management. To become competent in air operations systems management, the officer is expected to have a communications foundation or background, with an undergraduate or a master's degree in a computer or communications related field of study. The officer will attend both mandatory and voluntary training courses based upon their unit's mission and resource allocation, and will either attend or complete electronically a mandatory certification course. Based upon certification requirements and course completion, the officer's supervisor and/or senior communications officer can sign off on the competency and fully certify the officer. Accordingly, in keeping with the total force concept, the CFM, FAMs, and senior leadership may select the officer for a developmental tour in a System Program Officer, or Air Force Research Lab. Albeit outside the communications scope, the officer will be expected to learn their new craft as well as stay current in air operations systems management—to include completing training courses and the certification course.

Plans and Programs: The officer has the knowledge, skills, and abilities to perform contract management, human resource management, budget and forecast management, contingency planning, exercise planning, systems project management, program management, acquisition process management, program element management,

engineering and installation, and strategic planning. To become competent in plans and programs, the officer is expected to have a communications foundation or background, with an undergraduate or a master's degree in a computer or communications related field of study. The officer will attend both mandatory and voluntary training courses based upon their unit's mission and resource allocation, and will either attend or complete electronically a mandatory certification course. Based upon certification requirements and course completion, the officer's supervisor and/or senior communications officer can sign off on the competency and fully certify the officer. Accordingly, in keeping with the total force concept, the CFM, FAMs, and senior leadership may select the officer for a developmental tour in a System Program Office, Intelligence unit, Space Operations unit, or a Logistics Readiness Squadron. Albeit outside the communications scope, the officer will be expected to learn their new craft as well as stay current in plans and programs—to include completing training courses and the certification course.

Executive Officer: The executive officer competency can be tactical or operational depending on the organizational level supported and the magnitude of the duties. For the most part, the tactical-level executive officer competency is for officers serving in 33S billets at base-level, or base-level equivalent units. The operational-level executive officer competency is for officers serving in 97E billets, serving General Officers or senior civilians. Notwithstanding the organizational level, the officer has the knowledge, skills, and abilities to perform task management, speech writing, public affairs management, protocol, staffing management, editing, correspondence management, suspense management, and office management. To become competent in the executive

officer competency, the officer is expected to have a communications foundation or background, with an undergraduate or a master's degree in a computer or communications related field of study. The officer will attend both mandatory and voluntary training courses based upon their unit's mission and resource allocation, and will either attend or complete electronically a mandatory certification course. Based upon certification requirements and course completion, the officer's supervisor and/or senior communications officer can sign off on the competency and fully certify the officer.

In reviewing the new career field pyramid, the reader will see a special duty assignment. As required by AFPC, each assignment team is to assign career field officers to special duty assignments, to include instructor positions, academic positions, recruiting positions, and a host of other non-career field specific positions. As the assignment team assigns these officers to positions outside the career field, two considerations should be taken into account. First, the officer has the aptitude, demeanor, and knowledge to function in the special duty assignment. The assignment team needs to take great care in assigning communications officers because that officer is a reflection of the career field—as leadership should only send its best to shine in career broadening jobs. Second, the assignment team creates a re-immersion plan for any officer sent to a special duty assignment before they depart and temporarily leave the career field. It's prudent and a smart business practice to discuss career options and document several career paths for re-immersion upon their return from the special duty assignment. This lets the officer

know that the communications career field cares about their career, and that there's a vector for re-immersion into the career field.

Operational-level competencies are those competencies that field grade officers must attain to become broadened officers, ready to assume greater responsibilities. The intent is to have field grade officers lead organizations comprised of personnel doing myriad tasks—enabling mission capabilities. The officers at the operational level have acquired tactical competencies in at least three areas, and most likely six or seven areas by the time they make Major. What this does, is create multiple career paths for Majors to take in performing the mission and developing their own competencies and skills. At this level, Majors and Lieutenant Colonels will acquire the knowledge, skills, and abilities to function at the organizational or operational—tying tactical-level operations to strategy, doctrine and senior-level plans. Leadership still expects the officers to attend educational and training courses, accomplish certification courses and gain experience in their respective competencies. Operational-level officers are expected to have a solid communications foundation in many tactical competencies—so they have a firm foundation to rely upon when making high-level decisions on tactical and operational matters. The operational-level competency composition is located in Appendix A, and it should be noted that these are dynamic—as they should constantly be re-evaluated according to the CCA process. The following are the seven operational-level competencies as depicted in the new career field pyramid:

Garrison Operations: The officer has the knowledge, skills, and abilities to perform base-level infrastructure management, communications operations, network operations

management, policy and guidance management, base-level strategy, and contract management...to name a few. To become competent in garrison operations at the operational level, the officer is expected to have a communications foundation and experience in tactical competencies that map to this operational competency as outlined in Appendix B. Additionally, the officer should have an undergraduate or a master's degree in a computer or communications related field of study. The officer will attend both mandatory and voluntary training courses based upon their unit's mission and resource allocation, and will either attend or complete electronically a mandatory certification course. Based upon certification requirements and course completion, the officer's supervisor and/or senior communications officer can sign off on the competency and fully certify the officer.

Acquisition Management: The officer has the knowledge, skills, and abilities to perform acquisition program management, modeling and simulation management, research and development, contract management, program risk assessments, space systems procurement, air systems procurement, and systems test and evaluation...to name a few. To become competent in acquisition management, the officer is expected to have a communications foundation and experience in tactical competencies that map to this operational competency as outlined in Appendix B. Additionally, the officer should have an undergraduate or a master's degree in a computer or communications related field of study. The officer will attend both mandatory and voluntary training courses based upon their unit's mission and resource allocation, and will either attend or complete electronically a mandatory certification course. Based upon certification requirements

and course completion, the officer's supervisor and/or senior communications officer can sign off on the competency and fully certify the officer. Accordingly, in keeping with the total force concept, the CFM, FAMs, and senior leadership may select the officer for a developmental tour in a System Program Office, Intelligence unit, or a Space Operations unit. Albeit outside the communications scope, the officer will be expected to learn their new craft as well as stay current in acquisition management—to include completing training courses and the certification course.

C4ISR Networks: The officer has the knowledge, skills, and abilities to perform C4I systems program management, global information grid management, systems engineering and architecture management, acquisition process management, space systems management, air operations systems management, and communications engineering...to name a few. To become competent in C4ISR networks, the officer is expected to have a communications foundation and experience in tactical competencies that map to this operational competency as outlined in Appendix B. Additionally, the officer should have an undergraduate or a master's degree in a computer or communications related field of study. The officer will attend both mandatory and voluntary training courses based upon their unit's mission and resource allocation, and will either attend or complete electronically a mandatory certification course. Based upon certification requirements and course completion, the officer's supervisor and/or senior communications officer can sign off on the competency and fully certify the officer. Accordingly, in keeping with the total force concept, the CFM, FAMs, and senior leadership may select the officer for a developmental tour in a System Program Office, Intelligence unit, or a Space Operations

unit. Albeit outside the communications scope, the officer will be expected to learn their new craft as well as stay current in C4ISR networks—to include completing training courses and the certification course.

Netcentric Operations: The officer has the knowledge, skills, and abilities to perform C4I systems acquisition, netcentric technology procurement, systems engineering and architecture management, information operations, information assurance, air operations systems, test and evaluation, and information management...to name a few. To become competent in netcentric operations, the officer is expected to have a communications foundation and experience in tactical competencies that map to this operational competency as outlined in Appendix B. Additionally, the officer should have an undergraduate or a master's degree in a computer or communications related field of study. The officer will attend both mandatory and voluntary training courses based upon their unit's mission and resource allocation, and will either attend or complete electronically a mandatory certification course. Based upon certification requirements and course completion, the officer's supervisor and/or senior communications officer can sign off on the competency and fully certify the officer. Accordingly, in keeping with the total force concept, the CFM, FAMs, and senior leadership may select the officer for a developmental tour in a System Program Office, Intelligence unit, Space Operations unit, or in a projected information operations or cyberspace position. Albeit outside the communications scope, the officer will be expected to learn their new craft as well as stay current in netcentric operations—to include completing training courses and the certification course.

Plans and Programs: The officer has the knowledge, skills, and abilities to perform programming and budgeting process, contracting and source selection process, contingency and exercise planning, human resource management, strategy and doctrine management, and mobility planning...to name a few. To become competent in plans and programs, the officer is expected to have a communications foundation and experience in tactical competencies that map to this operational competency as outlined in Appendix B. Additionally, the officer should have an undergraduate or a master's degree in a computer or communications related field of study. The officer will attend both mandatory and voluntary training courses based upon their unit's mission and resource allocation, and will either attend or complete electronically a mandatory certification course. Based upon certification requirements and course completion, the officer's supervisor and/or senior communications officer can sign off on the competency and fully certify the officer. Accordingly, in keeping with the total force concept, the CFM, FAMs, and senior leadership may select the officer for a developmental tour in a System Program Office, Intelligence unit, or a Space Operations unit. Albeit outside the communications scope, the officer will be expected to learn their new craft as well as stay current in plans and programs—to include completing training courses and the certification course.

Expeditionary Operations: The officer has the knowledge, skills, and abilities to perform contingency planning, doctrinal planning, policy and guidance management, operational plan management, air operations systems management, netcentric technology management, systems engineering, and communications operations and maintenance management...to name a few. To become competent in expeditionary operations at the

operational level, the officer is expected to have a communications foundation and experience in tactical competencies that map to this operational competency as outlined in Appendix B. Additionally, the officer should have an undergraduate or a master's degree in a computer or communications related field of study. The officer will attend both mandatory and voluntary training courses based upon their unit's mission and resource allocation, and will either attend or complete electronically a mandatory certification course. Based upon certification requirements and course completion, the officer's supervisor and/or senior communications officer can sign off on the competency and fully certify the officer.

Information Systems Management: The officer has the knowledge, skills, and abilities to perform knowledge strategy and management tasks, knowledge engineering, information systems management, database strategy, portal strategy, policy and guidance management, plans and programs, and systems engineering management...to name a few. To become competent in information systems management, the officer is expected to have a communications foundation and experience in tactical competencies that map to this operational competency as outlined in Appendix B. Additionally, the officer should have an undergraduate or a master's degree in a computer or communications related field of study. The officer will attend both mandatory and voluntary training courses based upon their unit's mission and resource allocation, and will either attend or complete electronically a mandatory certification course. Based upon certification requirements and course completion, the officer's supervisor and/or senior communications officer can sign off on the competency and fully certify the officer. Accordingly, in keeping with the

total force concept, the CFM, FAMs, and senior leadership may select the officer for a developmental tour in a System Program Office, Intelligence unit, or a Space Operations unit. Albeit outside the communications scope, the officer will be expected to learn their new craft as well as stay current in information systems management—to include completing training courses and the certification course.

The strategic-level competencies are a conglomerate of the tactical and operational-level competencies and don't bear mentioning in this paper. At the point when communications officers are promoted to Colonel, the respective officers should already possess the knowledge, skills, and abilities to perform in a multitude of communications positions worldwide. Moreover, their assignments and allocations are managed by the Air Force Senior Leader Office with inputs from the career field leadership. Since the Colonels and Generals are at the top of the new career field pyramid, they are leaders in their field and as such should implement the Communications Officers Force Development program at their bases, installations, and agencies. Additionally, the senior leaders set high-level policy and guidance for the ranks to following—and the communications career field is no different. The senior leaders should meet occasionally and provide insight and guidance to the senior leaders and staff on the direction and health of the career field. That's exactly what the strategic-level officers are doing.

Conclusion

The CCA allows the CFM and career field leadership to objectively look at the communications career field and manage its officers by identifying its tactical and operational-level competencies. The competencies allow leadership to assign officers to

areas where they'll grow and development, yet the officers have a foundation to build upon in achieving mission objectives. Furthermore, the tactical and operational competencies are scoped as to provide the officers at various levels a road map to plot out developmental initiatives and guidelines to better serve the career field as a whole. The one aspect not really explained is the inherent leadership growth and development within the career field pyramid and the force development program. What the career field leadership needs to get away from is branding "base-level" flight commander and commander jobs as the only career field leadership positions. This is false and one of many flaws within the current force development process. Officers at all levels, in any competency pool, is growing his or her leadership potential—no matter if they are leading 20 or 200 people, or managing 200 billion dollars in systems acquisition. Bottom line is that all officers, no matter what the position, are gaining invaluable leadership traits and behaviors that are recognized during promotion and award boards.

In wrapping up this section, it's paramount to discuss developmental tours. Developmental tours are crucial for growing communications officers—and getting the officers out of their stove-pipe areas. The last I heard, the communications assignment team is not placing officers in developmental tours. This is a squandered opportunity—one that leaves the career field at a competitive disadvantage with other career fields. Communications officers need to grow, develop and be immersed into other career fields. These career fields are related to the communications career field in that the communications officer can share insight with the other unit, and the unit can share knowledge with the communications officers. If done appropriately and in direct

connection with CFM and FAM, a developmental tour is priceless in gaining knowledge from the assigned unit. However, remember two things: the developmental tour career field must be related to communications as to share knowledge and skills, and the officer is still responsible to complete the competency certification test.

The Communications Officer Career Field Program is a deliberate program that will take time to implement due to the current culture of not using competencies to guide decisions. All level officers must be briefed on the ramifications and nuisances associated with the current force development plan. Then, the career field strategy must be implemented in order to start outlining officer projections and growth strategies according to competencies. Once officer competencies are cataloged, then leadership can start looking for gaps between required capabilities and officer competencies—to fill holes until the next evolution of strategy. At this point, the reader will go on to section 9 to review the Communications Solution Analysis.

IX. Communications Solutions “Gap” Analysis

The Communications Solutions Analysis (CSA) is a gap analysis used to assess the requirement of officers needed with certain competencies against the supply of officers in the career field. From the 2005 report on Officer Career Field Force Development, RAND stated “...the Air Force has not constructed processes or measures to assess how well the supply of officer competencies match the demand for such competencies or whether there are actions that can be taken to ensure the optimal balance of career fields across the entire officer corps...” [389] This is a plaguing situation within the communications career field because leadership does not have an accounting of competencies, knowledge, skills, or abilities in order to even start to identify gaps between requirements and officer supply. Furthermore, leadership does not have a base line of the competencies or skills required for each position, each command, or for that matter, the career field as a whole. Therefore, it’s paramount to execute the Communications Officer Career Field Strategy that provides the data on capabilities, positions, and officers so the CFM, his or her staff, and leadership can conduct a CSA or gap analysis.

CSA Purpose

The GAO, in their December 2003 report on Effective Strategic Workforce Planning, declared that having a human resource strategy that ties into an overall business strategy provides “...a roadmap for an agency to use to move from the current to the future workforce needed to achieve program goals.” [390] Even though the Air Force has a

force development program, the program does not address the need to analyze the environment, build capabilities or apply competencies that would produce a force to meet mission objectives. Yes, in AFDD 1-1, it proclaims the usual rhetoric of “people are our most important asset” and “people must have the skills...”, but it does not address how the Air Force should assess and interact with its environment to uncover the capabilities required to meet mission objectives or future strategy. In the article, Quadrennial Review Allows DoD to Make Vector Changes, it stated “It’s impossible for any of us to see the future. We can only speculate or use informed judgments about what is ahead of us.”

[391] This is precisely why I propose the career field strategy that allows leadership to continuously assess the environment, learn and adapt, and then modify or transform our human resource strategy to meet future challenges. The CSA is a huge part of the strategy because it takes the capabilities from the CMCA and the competencies from the CCA, and compares these to the cataloged job descriptions to see if the communications career field has gaps in its competencies. Now, some leaders may say this is a bit too much—however we do this every day with the budget at all levels, with acquisition programs, and with supply-chain programs, all of which require supply and demand analysis. It begs the question, why doesn’t the Air Force do this type of analysis with its most important asset, its people?

In industry, Microsoft goes to great expense in identifying competency and position requirements. In 1995, Microsoft launched their Skills Planning and Development (SPUD) project that contained human resource management steps quite similar to the new Communications Officer Career Field Strategy. The project contained five

components: developing a structure of competency types and levels, defining required skills for each job, comparing employees' performance against required job skills, automating the human resource database, and linking the competencies to education, training, expertise, and certification requirements. [392] The project allowed Microsoft to better define its human resource requirements and identify competency gaps within its business units. Hopefully the reader can deduce similarities between what Microsoft did in 1995 and what I want the communications career field to do in 2006—and that's to deliberately identify position requirements, document personnel requirements, and then pinpoint gaps or discrepancies between the two requirements.

In the book, *Executive Intelligence*, it points out that Drucker discussed the accelerated pace of change and pointed out that leadership has to make constant adjustments to strategy and execution. He further stated "A CEO and his or her expert consultants can no longer simply generate a linear blueprint for success and expect employees to effectively execute it step-by-step." [393] The point Drucker alluded to is relevant to the communications officer career field, as leadership can't just "hire out" to a consultant and pay them to "spit out" a blueprint on how the career field will look or function in 2, 3, or 5 years. That's not the way it works since the environment changes so rapidly—that those leaders who hire out the strategy task are already considered behind the power curve. Instead, leaders should look to their own employees to manufacture a process that incorporates change as part of its model. This is the emphasis on the career field strategy—that the future and environment feed it information so leadership can adapt to its interaction and environmental indicators.

The CSA derives its purpose from the need to have the right people, with the right competencies, doing the right jobs—in order to achieve mission objectives. In section 7, I took you through a notional process to identify capabilities based off of environmental drivers. In section 8, I took you through the make up of career field competencies that map to the mission communications capabilities. In this section, section 9, I define the need to identify the gaps that exists between the required position competencies and the talent who bring competencies to the table. In the article, People Portfolio Management, it stated “Defining the gap provides the needed direction to the type of and timing of actions required to align your people portfolio with current and future business requirements. [394] In the current Air Force, one that is downsizing—instead of cutting across the force, communications leadership must deliberately identify gaps between personnel competencies and position competency requirements. This is not a task taken lightly as it requires a plan that is not isolated, but one that is built into the career field strategy. A plan that consists of identifying environmental factors, documenting capabilities, building competency pools, and then base lining all communications officer positions so leadership can get a handle on how many jobs have certain competencies and which jobs warrant cutting in the near future.

Who accomplishes the CSA or gap analysis? As this task requires vast career field experience, group discussions, and leadership oversight, the CFM, his or her staff, senior leadership and the DT conducts the gap analysis. It’s important to note that a gap analysis is not accomplished in isolation. In order for gap analyses to be effective,

leadership must make it part of the culture and provide guidance and policy to the CFM, human resource staff and other senior leaders—on how to conduct gap analyses.

CSA Concept

“Shortages in certain job categories along with recognizing the benefits of retraining and redeploying current employees have motivated human resource directors, managers and supervisors to begin strategically planning to meet future needs.” [395] How does leadership know that this is or isn’t the case within the communications career field? Without the knowledge of what competencies and skills officers possess, how can leadership make strategic decisions on manpower cuts, how can leadership assess mission requirements, and how can leadership brief future initiatives without knowing if officers possess the required competencies to meet future mission area challenges. Leadership can’t and that’s why the career field needs to accomplish the CSA—to continuously identify gaps that will enable leadership to shift resources or develop needed competencies. Nonetheless, the reader probably knows some leaders who think they can adequately state the career field’s health without a process, without measurements, without indicators, and without tracking mechanisms—and with that I state the following from the article, Talent and the New Paradigm for Human Resource Management:

Organization leaders sometimes say that they already know which talent pools are most crucial, and that the impact question is so obvious that their opinion will be shared by everyone; however, when we actually ask several business leaders to name the high-impact talent pools, their answers are so different that they could not possibly support reliable and consistent talent decisions. [396]

So what does it take to create the CSA process and put it into action within a career field or better yet, within the Air Force? First, you have to admit you have a human resource strategy and management deficiency—one that does not allow you to identify competency gaps. RAND, in their 2005 Officer Career Field Management report, cited that for the Air Force to attain and then maintain a workforce with a balanced skill and experience mix requires close and attentive management practices over all aspects of personnel management. [397] Currently, the communications career field does not have the “close and attentive” management oversight as stated within the RAND report. The career field needs to get out of the tactical mindset of merely assigning officers to positions and calling it force development. Second, the career field needs to work with AFPC and other career fields to implement a standardized force development program and structure across the board. Without a standardized structure, career fields will go off on their own and conduct myriad human resource practices not congruent with the institution as a whole. Third, the communications career field needs to implement its officer career field strategy and mandate that the CFM follow the strategy in order to identify competencies and mitigate the gaps. Finally, leadership must mandate that the CFM, his or her staff, the AFPC assignment team, and other associated with the career field program manage the assignment process according to the career field management plan—and not just arbitrarily assign officers to positions based upon quotas. If these initiatives happen, then leadership can start to identify gaps through the career field strategy and CSA process.

In a July 2004 Intercom article, it stated:

For our 33S officers, our force development goals is to ensure appropriate development opportunities are provided during tactical, operational and strategic periods of officers' careers. The development will be designed to equip the individual and the Air Force with the necessary capabilities that foster leadership and provide the catalyst to maintain warfighting superiority into the 21st century. [398]

Here the career field is 2 years later, and still no radical changes have occurred to realize or achieve the force development goal as illustrated in the passage from the Intercom magazine. All the reader has to do is walk around an organization with multiple communications officers and ask them about their career field's force development program—and you'll probably get a lot of comments. Just today, I was talking with a 12-year Major at AFIT who did not know the career field had a CFM, did not know the career field had a CFETP, and did not know about the drastic changes going on within the career field. Needless to say you'll get many questions and disgruntled stares, the one comment most everyone cites is that the communications career field has no plan—and to leave it up to the assignment team is not the answer. The answer is a career field force develop program comprised of a strategy, management plan, metrics, and execution strategy. A key and fundamental piece of the program is the CSA—allowing leadership to identify competency gaps and implementing plans and strategies to overcome the deficiencies.

The CSA concept is a simple one—identify competency shortages and implement a plan to mitigate or remedy the shortage. The plans should be based upon lasting change, and not a “thumb in the dike” temporary fix. It takes the organization or agency deliberate planning to conduct a CSA (on a continuous basis) and then identify competency shortages—those competencies needed in its workforce to meet and

accomplish future objectives. Once the organization identifies the shortages, it can develop strategies or plans, like the career field management plan that addresses the shortages and how to remedy the flaw in the process. Once the solution is in place, the CFM and leadership can ensure “...deployment of the workforce and the alignment of human capital approaches that enable and sustain the contributions of all critical skills and competencies needed for the future.” [399] The CFM and leadership can use the new career field pyramid as a tool to deliberately develop and sustain the career field competencies and stay in tune with the environment through continuous execution of the career field strategy.

The CSA results provide an understanding of competency gaps that hinder successful mission accomplishments. Basically, there’s a shortage of personnel competencies required to fulfill mission objectives. What happens at this point is a full breakdown of the mission capabilities identified from the CMCA and a thorough accounting of the required competencies classified in the CCA. Once leadership has accounted for the capabilities and competencies, they research the officers’ competencies and categorize the results. They also review the communications officer positions and categorize them according to the capabilities and competencies. At the end of the CSA, the CFM and leadership have a full base line of the required competencies versus the current career field competency numbers—so disparities in the numbers can be studied. Now, the CFM, leadership, and assignment team can assess officer competency profiles and assign the officers accordingly. This captures what the 2006 *QDR* stated: “The Military Departments are applying this same scrutiny across the Total Force to ensure that the

right skills reside inside each element. The Military Departments and Combatant Commanders will continually assess the force to ensure it remains responsive to meet future demands.” [400]

Career Field Pyramid in Action

The CSA provides leadership with a thorough analysis of the competency gaps and provides a concept of how to remedy the gaps. However, with a rapidly changing environment, it’s paramount to build in flexibility and agility into the career field strategy. The tool that provides the flexibility and agility is the new career field pyramid. The career field strategy and the pyramid allow leadership to be proactive in anticipating environmental changes and building a sustainable strategy that works under all changes in a dynamic world. [401] As competencies change, or as career field focus shifts to other capabilities, the CFM and leadership will assign officers to various jobs based upon their “genetic” make up and communications officer career field needs. The career field pyramid can assist leadership in assigning officers to career paths based off of changes to the environment or competency pools. The Army bases their specialty paths off a similar concept as it’s reflected in this passage:

..with some minimal thought and planning, most organizations can establish job tracks that build upon each other, and ensure that individuals get hand-on experiences that are relevant to the effective execution of the current job and are crucial learning experiences for developing the leader skills and abilities needed at the next organizational level. [402]

The career path development spawns the need to deliberately develop officers’ careers according to competencies. Officers are assigned to jobs based on their acquired

competencies and how well they match to position requirements. As officers are matched to positions based off their competencies, the officers go into the job with qualifications in certain competencies, potential to learn and develop new competencies, and the foundation of knowledge, skills and abilities to perform in the new position until they achieve full certification. This is a vastly different concept than today's assignment and development process, where some unqualified or unprepared officers are placed in positions based upon their need to work at various agencies or unit levels—and not based upon acquired competencies. This inadequate and ad hoc process must and will change due to leadership support and the demand for a smaller, more competent communications career field. If it doesn't, then senior Air Force leadership will lose trust and confidence in the communications officers' abilities—and rightfully so as the remaining communications officers will not be qualified or competent to meet future challenges.

The new career field pyramid is agile and flexible as the career field numbers can rise or fall, and the model is still applicable. Additionally, skills are shared among competencies so personnel are interchangeable with little to no training, or extensive upfront on-the-job experience. As a consequence of the career field strategy, if leadership decrees a new career field competency, it can easily be assigned knowledge, skills and abilities and be loaded against officers within the career field. The same holds true for those competencies that have served their purpose and for one reason or another, are no longer required as part of the career field force development program. This same agile and flexible human resource concept is used at IBM. "IBM believes that an on-demand business requires and 'on-demand workforce'—one that is responsive to market

requirements—adaptively brings the right skills and expertise to meet client demand, is resilient to market forces, and provides strong leadership.” [403] The very same concept should be used by the communications career field—as the officers work in a career field subject and responsive to environmental demands. Because the officers live in this type environment, leadership must manage the officers according to competency pools, located in the new career field pyramid—one that is adaptable and flexible in all conditions.

It’s all great to have a Communications Officer Career Field Strategy, a career field management plan—and all its components—but without senior leadership support, guidance, authority and mandate, the program is only as viable as the paper it’s written on. In the book, *The Workforce Scorecard*, it explicitly proclaimed thoughts on leadership support:

...the CEO, with senior HR leader, must clarify workforce expectations based in part on input from the senior HR leader, concerning the current workforce, future workforce requirements, and labor market availability. It is important to clarify that the major objective, the major deliverable of the HR function, is a workforce that can deliver the firm’s strategy and the ability to flex as the business strategy changes. [404]

In pondering the passage, leadership must not only talk-the-talk, but set governance for the program and associated processes—and provide the resources to execute the strategies. Leadership must also delegate key responsibilities to those few individuals who are qualified in human resource management, understand the career field nuances, and are capable at strategy management and execution. Without the strong and enduring support of senior leadership, the Communications Officer Force Development Program

will not survive and prosper—as is seen and demonstrated by the failing Air Force program.

CSA Process

The CSA process is simple and straightforward—though it takes administrative lead time to get the proper data to accomplish the tasks. The tasks include base lining all communications officers' positions, base lining all communications officer competencies, documenting senior officer career paths and associated competencies, comparing current officers' competencies to current position requirements to identify gaps, comparing current positions against capabilities to identify gaps, and document process to handle aligning officers to positions when they're not qualified to fulfill the duties. Albeit a lot of tasks, some of the later tasks flow into the career field management plan—but for synergy, I'll touch upon all tasks as they relate to the gap analysis. For this paper, this section was not accomplished due to time constraints and lack of manpower support.

The first task is to base line all the communications officer positions within DoD. Currently, the communications career field does not have an accurate accounting of all its officer positions—so this will be a major undertaking the initial time. However, once accomplished, the FAMs will be charged with modifying, adding and deleting the position descriptions. This task includes documenting position descriptions, which capabilities the position supports, and creating the required knowledge, skills, and abilities associated with the position. Furthermore, the unit must document education, training, certification, and experience requirements so the CFM, DT, and the assignment team understands the type of officer required to perform in the position. As the CFM and

the assignment team compiles the position descriptions, they are stored manually at first and then eventually in an information technology system to be determined later. It's important to note that the process, at this point, is more important than the automation—as leadership has to develop and mature the process and test the concept before automation is applied to enhance the process.

The second task is to base line all communications officer profiles to include past positions, past competencies, education, communications training, other pertinent training, certifications, experience levels, and skills according to the career field education and training plan. Similar to the position base lining, this task is time intensive and requires support from the assignment team and FAMs. However, once the officers are profiled, it will take minimal time on part of the FAMs, AFCA, and the supervisors to keep the profiles current. As the base lining occurs, the CFM and coordination with AFCA and FAMs will store the profiles manually at first on a computer—before applying automation. Again, the process is the most important aspect and once it's proven—then automation will happen based on set requirements.

The third task is to create projected career paths using senior officer careers as templates. This will take concerted efforts on part of the senior officers as well as the CFM and FAMs. However, this is an excellent opportunity to document the Colonels and Generals careers as they relate to the new career field pyramid and competencies. Once the career paths are complete, the CFM, FAMs and AFPC will store the career paths manually at first and then in the information technology system so all officers can review the career paths as they're updated to depict the use of the competencies. The

concept will help officers compare their careers against senior leaders' careers at specific points in time, based upon competencies versus merely listing former job titles. That way, officers will have a bench mark so they can start to set proper career expectations.

The fourth task occurs when the CFM, his or her staff, and senior leadership analyze the current positions versus officer profiles to identify gaps in current competencies. This is an arduous tasks that takes precision, time, and resources to accomplish—but must in order to properly align the career field according to required competencies which enable mission capabilities. The analysis also delves deeper by looking at officers in current jobs against the position requirements to see if the present officer is qualified to hold the post. If not, then certain actions associated with the career field management plan would have to be accomplished to either move the officer or get them qualified and certified to hold the post. The numbers of qualified and unqualified personnel are tracked and metrics reported to senior leadership on current state along with future projections to clear up the gap. The same process is used to identify those officers who have been assigned to positions where they're not qualified. The FAM is responsible for working with the officer, supervisor and chain of command on setting up a qualification or certification plan and then executing it until the officer is qualified.

The fifth task is a hold-over from the CMCA, and must be accomplished either during the CMCA as a capability validation or in the CSA as part of the gap analysis. The process includes taking the current positions that are aligned to capabilities and compare the numbers to the capabilities to see if all capabilities are accounted for and to see if the

numbers warrant further examination. Even though this step is best accomplished in the CMCA, it must be revisited during the CSA to validate the positions.

The last CSA task is to align officers to positions based upon their competencies and respective competency ratings, or reassign officers who cannot perform according to their level of competency. It's hard to tell an officer that they're not competent, but it's even harder to watch an officer struggle or even fail because they're not qualified to perform. Therefore, it's important to identify those officers entering jobs, filling positions, or leaving positions—and can't perform because they're not qualified. Leadership has a responsibility to identify these individuals, assess their situation, provide or allocate training resources, and prepare them for certifications. This is accomplished in conjunction with identifying the officers' profiles and the gap analysis.

Though not a task, but just as important is the need to capture metrics so leadership can gauge success or failure in tracking officer competencies and position descriptions. In section 10, I'll go further into metrics and their impact on the career field management function. However, at this point, it's important to mention that the career field needs to track positions according to capabilities and competencies. The career field needs to track officers according to competencies, education, and training. Also, the career field needs to track the gaps identified in this CSA—to ensure that it's receiving proper attention in resolving the situation.

Conclusion

The CSA is the tool to identify the gap between the position competency requirements and the officer competencies. Basically, it's a supply versus demand relationship. What

it does it provide leadership an understanding of how the program develops its officers to meet mission objectives, and the career field does that by assigning officers to positions. In doing so, the officer's competencies must match the position requirements in order for a good match—one that determines whether the officer can perform. This is the intent—a simple and straight forward process of identifying the gaps—the differences between what's required for the position and what's supplied to the position.

X. Career Field Force Development Metrics

The quintessential part of any plan is its metrics program—and its ability to be actionable based upon the resulting measurements. Today, in the communications career field, leadership does not have a common core set of metrics that tell the story of the officer career field's health. Yes, this is difficult to believe since many articles cited throughout this paper said that communication officers are growing, gaining skills, attaining competencies—but without a shred of factual, objective data to prove the case.

I find this case similar to what the GAO cited as a limiting factor in the space cadre development:

DoD has not developed performance measures and a plan to evaluate those measures in order to assess space cadre professional development and management, as provided for in a results-oriented management approach. Performance indicators and an evaluation plan would help DoD measure program outcomes and compare results to goals. [405]

Like the space cadre, the communications career field is diverse and to properly formulate a development plan, leadership must mandate core metrics that provide measures of the actions against stated goals. The measures or metrics don't have to be pretty charts or graphs—but objective numbers that depict progress towards actionable goals. Without these metrics, leadership cannot gauge progress, performance, process improvement, or officer development—in achieving a total force concept with the abilities to meet future mission objectives. Accordingly, the metrics would be based off of senior leadership guidance on what they want to measure in order to gauge success. Further on in this section, I introduce a set of core metrics from which leadership can start to develop the career field metrics.

In the GAO report on Effective Strategic Workforce Planning, they recommend metrics in two distinct categories, progress towards meeting human resource goals and the contribution of human resources in achieving programmatic goals. [406] In further stating the case for metrics the GAO cited “Periodic measurement of an agency’s progress toward human capital goals and the extent that human capital activities contributed to achieving programmatic goals provides information for effective oversight by identifying performance shortfalls and appropriate corrective actions.” [407] However, when the communications leadership implements metrics, they must guard against the “metrics trap” and not implement a number of metrics just to have metrics. Contrary to having no metrics, too many metrics dilute the purpose and make the numbers irrelevant to operational success and objective measurements. What leadership must do is choose a core set of metrics and then use them in day-to-day operations to further evolve and define more adequate metrics. This process is alluded to in the 2004 RAND report on Air Force Procurement Workforce Transformation, where they stated “...metrics should be revisited over time to ensure that they are providing needed information and that they remain aligned with organizational objectives.” [408] Consequently, the CFM and leadership need to develop a common core set of metrics and implement a process to constantly revise the metrics according to how they’ll be used to gauge career field health.

“The key is to craft a range of metrics that together give the senior executive team an idea of how efficiently and effectively they are managing their human asset, and how well that asset is being used to support business strategy.” [409] As stated, the important

underlying thought is that the metrics paint a picture or tell the story about the health and vitality of human resource assets, or in this case the communications officer career field. As a result, I believe senior leadership should implement effectiveness metrics, efficiency metrics and impact metrics—to “paint the picture” of career field health and vitality. When leadership looks at effectiveness metrics, they should want to know if career field management actions are aligned and producing the desired competency results. In efficiency metrics, leadership should get indicators on how the career field processes are working and are they able to deliver results in a timely and accurate manner. And when leadership studies impact metrics, they want to see the effect the program and its processes are having on achieving mission objectives and aligning to career field goals. These three types of metrics would provide leadership with objective data to base decisions upon—something that is missing in today’s communications officer career field.

In the article, *HR Metrics that Count*, it states several questions that leadership must ask in order to implement meaningful metrics: what would be the impact if leadership could measure human resource strategy results against business accomplishments, how could we measure it, what human resource development would we need to make it happen, how much would it cost, and what type metrics do we need to make it happen. [410] These are vital questions that senior communications leadership needs to be asking as they approach an estimated 59 percent officer career field reduction—with no set metrics to tell them if they’re cutting officers in the right areas. Furthermore, without metrics or competency counts, how does leadership know if they’re cutting officers with

vital competencies or redundant competencies? In today's environment, without a metrics program, they can't tell the difference. These type issues are raised in the article,

HR Metrics: The Business Case:

Though most companies would say that employees are their greatest assets, few would say they find these assets easy to measure. Are the company's most valuable assets productive? Are they regularly upgraded through targeted training? Does the company know how to acquire more quality assets cost-effectively? Do the assets stay with the company long enough to be worth the investment? [411]

As depicted in the article passage, these are the types of questions the communications leadership must ask—or else their career field decisions are baseless and formed on mere speculation. And, basing major strategic decisions on speculation is what destroys human assets, competitive advantage, and a career field prowess.

Enough rhetoric—let's get to the meat...the metrics. Earlier, I stated the career field should have effectiveness, efficiency, and impact metrics. This is true; however I separated them into four categories as depicted in the article "Do Human Resources Really Add Value to a Business." [412] The categories are HR Process Measurements, Competency Measurements, Unit Perspective Measurements, and Strategic Capability Measurements. Although these categories are not identical to the ones described in the article, they provide a similar analytical sense. Nonetheless, by separating the metrics into four categories, leadership will be able to focus on the key parts of the Communications Officer Career Field Force Development Program—and measure success, or maybe failure. Either way, with these basic core metrics, leadership will have a way to gauge program health against stated goals. It's important to note that I'm not getting into goals at this juncture, nor am I going to argue the viability of the metrics—as

I'm throwing these metrics out there for leadership to look at and ponder what they want to measure.

Here are the four metric categories with their respective measurements and rationale on why they'd be important indicators of career field health:

HR Process Measurements: For this category, leadership asks the question...Is the CFM managing officer resources effectively and efficiently? In asking this question, leadership wants to know if the CFM and staff agencies are focusing efforts on developing the officers and are the processes working as prescribed. Several measurements in this category are time to fill positions, vector matches and non-matches, perceived value of the career field management plan to units, training and education fills, and dollars spent on training and education. These metrics are basic and can be enhanced upon implementation and management—to see if they provide the required data for leadership to make career field decisions.

Competency Measurements: For this category, leadership asks the question...Do we have the right mix of officer competencies to accomplish current and future missions? In asking this question, leadership wants to know if the career field program, the CFM and staff are facilitating the growth and development of its officers and their competencies. Basically, it will measure the effectiveness of the career field pyramid and program in developing officers by competencies. Several measurements in this category are workforce competency counts, competency counts as compared to required competencies, officer retention and succession, workforce competency demographics by ranks and time in service, competency certification rates and time to full certification, and

ability to change officer career paths or to take on new mission capabilities. These metrics are basic and can be enhanced upon implementation and management—to see if they provide the required data for leadership to make career field decisions.

Unit Perspective Measurements: For this category, leadership asks the question...Are we providing units with competent officers? In asking this question, leadership wants to know if the CFM, DT, and assignment team are providing competent officers to fill vacancies. Furthermore, this will gauge the effectiveness of the career field program, its training and certification processes in producing qualified officers with respective competencies to match position descriptions. Several measurements in this category are unit's perceived value of the career field program, unit's perceived value of officer assets assigned to their unit, perceived officer flexibility in acquiring new competencies, and the officer's perceived value of the career field program. These metrics are basic and can be enhanced upon implementation and management—to see if they provide the required data for leadership to make career field decisions.

Strategic Capability Measurements: For this category, leadership asks the question...Are our career field officer assets aligned with future needs? In asking this question, leadership wants to know if the CFM, staff, and the program are creating a agile and flexible force—allowing the career field as a whole to change and maneuver according to environmental impacts. Yes, this is a measure of the impact of the program against leadership objectives for aligning career field competencies to mission capabilities. Several measurements in this category are various levels of workforce demographics (tactical, operational, strategic) versus what's required, ability to change

officer career paths to meet changing capabilities, ability to add or delete competencies and realign officers accordingly, alignment between strategy and the career field force development program, and the ability to add or grow new mission capabilities based upon current competencies and underlying skill sets. These metrics are basic and can be enhanced upon implementation and management—to see if they provide the required data for leadership to make career field decisions.

Again, the four categories are not made up of fancy charts or graphs. The categories provide hard-hitting metrics that would provide leadership with a fundamental set of metrics to start gauging career field health and vitality. In the article, *HR as Strategic Partner*, the authors stated “By establishing HR metrics that link back to business objectives, organizations can build an effective connection between HR and the business. Metrics help ensure that plans are executed and provide HR employees with clear and specific goals to rally around.” [413] This points out that leadership must mandate the metrics, link them to business objectives, and then the CFM, staff and leadership at various levels will start to measure success accordingly.

“To be effective, a framework for workforce metrics must be practical, easily understood throughout the firm, and actionable.” [414] The CFM, staff, FAMs, assignment team, AFCA, and leadership at all levels have a part in developing the metrics framework. The framework or structure will be a key part of the force development program, and vital to measuring or gauging career field development efforts. The CFM, with the mandate of senior leadership, will implement governance over the metrics program and stated objectives on how to use the metrics for improvement efforts. The

CFM will also document the collection mechanisms used to gather and consolidate the data that forms the baseline of each metrics. Furthermore, the CFM will outline leadership's process for field units to input their recommendations on enhancing the metrics or methods to more efficiently gather the data. Bottom line, the CFM will need the field units and leadership's cooperation and input in making the metrics program a viable part of the Communications Officer Career Field Force Development Program.

XI. Conclusion

The following statement on force development is from the *FY2007 Air Force*

Posture Statement: “The fundamental purpose of force development is to produce leaders at all levels with the right capabilities to meet the Air Force’s operational needs by leveraging deliberate training, education and experience opportunities.” [415] In reading this statement and many more statements just like it in doctrine, sight pictures, briefings and speeches, I get the understanding that people are the Air Force’s most important asset. All the articles depict force development as a grand program, rooted in training, education, and experiences. And, for the most part, it’s a grand program—one with great intent and leadership support—on paper. So do I tell you that force development has trickled down through all facets of the Air Force, and that doctrine is acted upon by the institution and its people. Or, do I tell you the truth—that both leadership and force development doctrine have great intentions, but leadership has not implemented a program, or plan that even comes close to expending the time, resources, or personnel to make the program enable the doctrine. The truth is that the Air Force puts more emphasis on creating fitness uniforms, developing new BDUs, and other miscellaneous changes than it does developing its officers. As you read through the paper, time and time again you came upon passages and quotes from myriad GAO and RAND reports describing our force development deficiencies. Furthermore, you’ve read remedies and foundational solutions—as GAO and RAND both provide the answers to the Air Force’s force development shortfalls. However, to date, we don’t see the

fundamental or transformational changes necessary to bridge the gap between what doctrine states is force development, and the force development actions and execution.

AFDD 1-1, *Leadership and Force Development Doctrine* goes into excruciating detail about force development, training, education, leadership responsibilities and so on. The doctrine specifically spells out the intent and service responsibilities as related to expectations, developmental opportunities, training, feedback, vectors, and career growth. Yet, when examining the execution piece of the doctrine, those charged with implementing force development fall extremely short in executing the fundamental facets of force development. For instance, how can doctrine proclaim that leadership is building skilled Airmen, when the institution doesn't track skills, or knowledge, or abilities? How can doctrine cite the need to tie training to force development when the institution does not have the technology or program to track, assess, or for that matter, analyze training and its impact on the mission? And, how can leadership state that force development will develop skilled Airmen—when it has no measurements or metrics to prove or disprove the statement? These were questions I was burdened with when writing this paper—as I knew the flagrant answers before I even asked the questions.

Even more shocking were the answers to these questions when asked to my career field force development professionals. Questions like “do you receive human resource training?” “Do you track competencies and skills?” “Do you base assignment matches on competencies and growth potential?” And, “do you have metrics that you show leadership on the health of the career field?” All “no” answers—and these are basic human resource management questions that support doctrine, sight pictures, leadership

briefings, and transformational documents. In reviewing books, briefings, force development documents, and articles, I came to the conclusion that the communications officer career field does not have a development plan. Now, in the midst of a massive 59 percent communications officer reduction, I can't see how leadership could remotely understand which officers to cut and which officers to choose to stay within the Air Force. Without the basic force development facets, leadership is unable to logically and systematically make officer career decisions based upon rudimentary data, ODPs, performance reports. The force development problems are systemic and go to the root of the problem—that the communications officer career field does not have a force development program, strategy, concept, management plan, training and education plan, metrics, or leadership governance and support.

The new Communications Officer Force Development Program would provide the fundamental structure to grow its officers—whether in a strong budgetary cycle or during recessionary times where manning cuts are inevitable. Whether a force of 4,000-plus officers or a force of 2,400 officers, this program along with its built in strategy to continuously assess the environment, will provide leadership with a program and inherent tools to manage the career field through peaceful or tumultuous times. Look at the program and see that it assigns responsibilities, high-level strategy to assess the environmental factors, human resource structure and processes, competencies and underlying skills, and metrics to evaluate progress. Yes, it needs to be flexible and agile, yet it needs to provide structure that all communications officers understand as they progress through their careers. Ask yourself how many times the career field hierarchy

has reorganized in the last 6 years? Too many—and with it, the leadership lost focus on its most important asset—its people. Now that the career field has found synergy and stability in its structure, and is embracing manpower and resource reductions, it's time to take command of the one constant—its people and build and administer this program to grow its officers. It's far too important to leave to a contractor, or to a quick analysis of numbers to satisfy PBD 720—as these are communications officers—who enable critical Air Force warfighter capabilities. It's time to embrace the officer career field and make this plan happen!

No plan is complete without coming up with a mechanism to evaluate the program, processes and development gains. Section 10 goes through four categories of metrics that base line the types of products and processes leadership must measure—in order to evaluate the career field's force development progress. You have to ask, how is leadership drawing down the career field when they don't even measure success in terms of its officers? How can leadership measure success if it doesn't have an accounting of all its officer positions? How can leadership cut positions if it doesn't even know what the officers do on a daily, weekly, monthly basis? And how can leadership brief they'll cut 59 percent of the work force when they don't know what 59 percent of the officer work force does? These and many more questions can be answered with a viable and rich officer career field metrics program. Section 10 provides the foundation for communications officer metrics program—one that must be nurtured and manifested over time.

That's it in a nutshell. A lot of sweat went into this project—far more than probably anticipated by the faculty and other students. However, force development is far too important to leave to chance, leave to crisis drills, or to other officers or civilians with no human resource management experience. In writing this graduate research paper, I had the military and corporate experience—and I wanted to be heard! It's meant to be a starting point, a discussion point, and hopefully the beginning of great debate and efforts towards building the Communications Officer Force Development Program.

Appendix A: Tactical and Operational Competencies

<u>Garrison Operations</u> (Tactical)	<u>Net-centric Technology</u> (Tactical)
<p><u>Knowledge:</u></p> <ul style="list-style-type: none"> • Defense, Joint, and Air Force Communications Instructions • Communications Infrastructure Standards • Voice and Data Networking Principles • Maintenance Standardization and Evaluation Program • Information Assurance • Information Systems Management • Base-level Resource and Budget Process <p><u>Skills:</u></p> <ul style="list-style-type: none"> • Communications Maintenance Management • Base-level Contingency Planning and Management • Network Protection, Management and Restoration • Information and Records Management • Visual Information • Postal Management • Contractor Management • Base-level Communications Engineering and Installation • Communications Resource Management • Knowledge Management <p><u>Abilities:</u></p> <ul style="list-style-type: none"> • Leadership • Problem Solving • Oral and Written Communication • Time and Resource Management • Judgment • Cognitive Ability • Project Management • Personnel Evaluation <p><u>Education & Training:</u></p> <ul style="list-style-type: none"> • Technical Bachelors or Masters Degree • AFIT/NPS Masters Degree Program • Education Within Industry (EWI) with research paper • 333 TRS – Communications Officer Networking Training Course • AFCA – Network Seminar • AFCA – Maintenance Management Seminar • AFCA – Information Protection Seminar • AFCA – Information Systems Management 	<p><u>Knowledge:</u></p> <ul style="list-style-type: none"> • Defense, Joint, and Air Force Communications Instructions • Global Information Grid Strategy • Accreditation and Certification Guidelines • C2 Constellation Net Strategy • Frequency Management • Satellite (Transformational) Communications • Airborne Networks • Joint Tactical Radio System • DISA Operations • Overall Network Operations Security Center Strategy • DoD Architecture Framework <p><u>Skills:</u></p> <ul style="list-style-type: none"> • Architecture Project Management • Frequency & Spectrum Management • Global Information Grid Circuit Management • Information Assurance Management • Regional Operations Security Center Management • Satellite Operations Management • Airborne Operations Management • Warfighter Integration and F2T2EA Concepts • Knowledge Technician/Engineering • Knowledge Management <p><u>Abilities:</u></p> <ul style="list-style-type: none"> • Leadership • Problem Solving • Oral and Written Communication • Time and Resource Management • Cognitive Ability • Project Management • Strategic and Conceptual Thinking • Creativity • Systems Thinking • Vision <p><u>Education & Training:</u></p> <ul style="list-style-type: none"> • Technical Bachelors or Masters Degree • AFIT/NPS Masters Degree Program • USMC Expeditionary Warfare School (EWS) • Education Within Industry (EWI) with research paper

<p>Seminar</p> <ul style="list-style-type: none"> • AFCA – Information Management Seminar • AFCA – Planning & Implementation Seminar • AFCA – Project Planning Seminar • OTR – Network Management Course <p><u>Certification Requirements:</u></p> <ul style="list-style-type: none"> • Expeditionary Communications Officer Training Course • AFSC 3-level upgrade (18 months) • At minimum 1 year in position • CFETP competency qualification based on position • Garrison Operations Certification Course completion (projected on-line or in-residence course) <p><u>Potential Developmental Tours:</u></p> <ul style="list-style-type: none"> • Contracting Squadron (64P) • Comptroller Squadron (Budget – 65F) • Operational Support Squadron (Command Post – 13B) • Maintenance Squadron (21M) • Logistics Readiness Squadron (Logistics Planner – 21R) 	<ul style="list-style-type: none"> • 333 TRS – Enterprise Network Operations Course • 333 TRS – Communications Officer Warfighting Integration Education Course • OTR – Military Satellite Communications in a Netcentric, Transitional Communications World Course • OTR – Terrestrial and Wireless Networking and Trends Course • OTR – Introduction to Netcentric Warfare Course • OTR – Advances in Telecommunications Course • AFIT – Systems Engineering Course <p><u>Certification Requirements:</u></p> <ul style="list-style-type: none"> • Expeditionary Communications Officer Training Course • AFSC 3-level upgrade (18 months) • At minimum 1 year in position • CFETP competency qualification based on position • Net-centric Technology Certification Course completion (projected on-line or in-residence course) <p><u>Potential Developmental Tours:</u></p> <ul style="list-style-type: none"> • System Program Office (62E, 63A) • Air Force Research Lab (62E, 63A) • Space Operations (13S)
<p style="text-align: center;"><u>C4I Systems (Tactical)</u></p> <p><u>Knowledge:</u></p> <ul style="list-style-type: none"> • Defense, Joint, and Air Force Communications Instructions • Joint Technical Architecture Standards • JCIDS Process • Acquisition Process • Sustainment Standards • Global Information Grid Strategy • Accreditation and Certification Guidelines • C2 Constellation Net Strategy • Satellite (Transformational) Communications • Airborne Systems • Space and Missile Systems • Special Operations Systems • DoD Architecture Framework • Integration Guidelines • PPBE Process • Cryptographic Standards and Guidelines 	<p style="text-align: center;"><u>Test & Evaluation (Tactical)</u></p> <p><u>Knowledge:</u></p> <ul style="list-style-type: none"> • Defense, Joint, and Air Force Communications Instructions • Air Force Operational Test & Evaluation Center Standards and Guidelines • Design, Test and Evaluation Management • Operational, Test and Evaluation Management • Joint Technical Architecture Standards • JCIDS Process • Acquisition Process • Sustainment Standards • Global Information Grid Strategy • Accreditation and Certification Guidelines • C2 Constellation Net Strategy • Satellite (Transformational) Communications • Airborne Systems • Space and Missile Systems • Special Operations Systems • DoD Architecture Framework • Integration Guidelines

<p><u>Skills:</u></p> <ul style="list-style-type: none"> • Systems Project Management • Engineering and Integration • Accreditation and Certification • Systems Engineering and Architecture Management • Warfighter Integration and F2T2EA Concepts • Contractor Program Management • Requirements Analysis • Acquisition Process Management • Knowledge Management <p><u>Abilities:</u></p> <ul style="list-style-type: none"> • Leadership • Problem Solving • Oral and Written Communication • Time and Resource Management • Cognitive Ability • Project Management • Strategic and Conceptual Thinking • Systems Thinking • Vision • Judgment <p><u>Education & Training:</u></p> <ul style="list-style-type: none"> • Technical Bachelors or Masters Degree • AFIT/NPS Masters Degree Program • USMC Expeditionary Warfare School (EWS) • Education Within Industry (EWI) with research paper • 333 TRS – Enterprise Network Operations Course • 333 TRS – Communications Officer Warfighting Integration Education Course • OTR – Global Command and Control System Netcentric Family of Systems Leading to JC2 Course • OTR – Introduction to Netcentric Warfare Course • OTR – Advances in Telecommunications Course • AFIT – Systems Engineering Course <p><u>Certification Requirements:</u></p> <ul style="list-style-type: none"> • Expeditionary Communications Officer Training Course • AFSC 3-level upgrade (18 months) • At minimum 1 year in position • CFETP competency qualification based on position • C4I Systems Certification Course completion (projected on-line or in-residence course) • DAU APDP Comm-Computer Level 1 & 2 	<ul style="list-style-type: none"> • PPBE Process • Cryptographic Standards and Guidelines <p><u>Skills:</u></p> <ul style="list-style-type: none"> • Systems Project Management • Engineering and Integration • Accreditation and Certification • Warfighter Integration and F2T2EA Concepts • Contractor Program Management • Acquisition Process Management • Test Engineering Management Plan Development • Test Data Analysis • System Risk Management Proposals • Test Techniques and Guidance Development • Test Criteria Development and Implementation • Knowledge Management <p><u>Abilities:</u></p> <ul style="list-style-type: none"> • Leadership • Problem Solving • Oral and Written Communication • Time and Resource Management • Cognitive Ability • Project Management • Systems Thinking • Judgment • Integration <p><u>Education & Training:</u></p> <ul style="list-style-type: none"> • Technical Bachelors or Masters Degree • AFIT/NPS Masters Degree Program • Education Within Industry (EWI) with research paper • 333 TRS – Enterprise Network Operations Course • 333 TRS – Communications Officer Warfighting Integration Education Course • OTR – Advances in Telecommunications Course • AFIT – Systems Engineering Course <p><u>Certification Requirements:</u></p> <ul style="list-style-type: none"> • Expeditionary Communications Officer Training Course • AFSC 3-level upgrade (18 months) • At minimum 1 year in position • CFETP competency qualification based on position • Test & Evaluation Certification Course completion (projected on-line or in-residence course)
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<p>Certification (Acquisition Billet)</p> <p><u>Potential Developmental Tours:</u></p> <ul style="list-style-type: none"> • System Program Office (62E, 63A) • Air Force Research Lab (62E, 63A) • Intelligence (14N) • Space Operations (13S) 	<ul style="list-style-type: none"> • DAU APDP Test & Evaluation Level 1 & 2 Certification (Acquisition Billet) <p><u>Potential Developmental Tours:</u></p> <ul style="list-style-type: none"> • System Program Office (62E, 63A) • Air Force Research Lab (62E, 63A) • Intelligence (14N) • Space Operations (13S)
<p><u>Systems Engineering/Architecture (Tactical)</u></p> <p><u>Knowledge:</u></p> <ul style="list-style-type: none"> • Defense, Joint, and Air Force Communications Instructions • Joint Technical Architecture Standards • JCIDS Process • Acquisition Process • Sustainment Standards • Global Information Grid Strategy • Accreditation and Certification Guidelines • C2 Constellation Net Strategy • Satellite (Transformational) Communications • Airborne Systems • Space and Missile Systems • Special Operations Systems • DoD Architecture Framework • Architecture Tools • Object Oriented Analysis and Design • Integration Guidelines • PPBE Process • Cryptographic Standards and Guidelines <p><u>Skills:</u></p> <ul style="list-style-type: none"> • Systems Engineering Management Plan Development • Engineering and Integration • Accreditation and Certification • Systems Engineering and Architecture Management • Contractor Program Management • Requirements Analysis • Acquisition Process Management • Program Element Monitor • Knowledge Management <p><u>Abilities:</u></p> <ul style="list-style-type: none"> • Leadership • Problem Solving • Oral and Written Communication • Time and Resource Management 	<p><u>Acquisition/R&D/M&S (Tactical)</u></p> <p><u>Knowledge:</u></p> <ul style="list-style-type: none"> • Defense, Joint, and Air Force Communications Instructions • Acquisition Process • JCIDS Process • PPBE Process • DoD Architecture Framework • Architecture Tools • Object Oriented Analysis and Design • Integration Guidelines • Source Selection Policy and Guidance • Joint Technical Architecture Standards • Air Force Materiel Command Operations • Sustainment Standards • Global Information Grid Strategy • Accreditation and Certification Guidelines • C2 Constellation Net Strategy • Satellite (Transformational) Communications • Airborne Systems • Space and Missile Systems • Special Operations Systems • Cryptographic Standards and Guidelines <p><u>Skills:</u></p> <ul style="list-style-type: none"> • Contractor Program Management • Contract Development and Modification • DoD and AF Acquisition Process Management • Systems Engineering and Architecture Management • Engineering and Integration • System Program Management • Accreditation and Certification • Requirements Analysis • Cost Analysis • Knowledge Management <p><u>Abilities:</u></p> <ul style="list-style-type: none"> • Leadership • Problem Solving

<ul style="list-style-type: none"> • Cognitive Ability • Project Management • Strategic and Conceptual Thinking • Systems Thinking • Vision • Judgment • Integration <p><u>Education & Training:</u></p> <ul style="list-style-type: none"> • Technical Bachelors or Masters Degree • AFIT/NPS Masters Degree Program • Education Within Industry (EWI) with research paper • 333 TRS – Enterprise Network Operations Course • 333 TRS – Communications Officer Warfighting Integration Education Course • OTR – IT Project Management Course • OTR – Advances in Telecommunications Course • AFIT – Systems Engineering Course <p><u>Certification Requirements:</u></p> <ul style="list-style-type: none"> • Expeditionary Communications Officer Training Course • AFSC 3-level upgrade (18 months) • At minimum 1 year in position • CFETP competency qualification based on position • Systems Engineering Certification Course completion (projected in-residence at AFIT or online) • DAU APDP Comm-Computer Level 1 & 2 Certification (Acquisition Billet) <p><u>Potential Developmental Tours:</u></p> <ul style="list-style-type: none"> • System Program Office (62E, 63A) • Air Force Research Lab (62E, 63A) • Intelligence (14N) • Space Operations (13S) 	<ul style="list-style-type: none"> • Oral and Written Communication • Time and Resource Management • Cognitive Ability • Project Management • Strategic and Conceptual Thinking • Systems Thinking • Vision • Judgment • Integration <p><u>Education & Training:</u></p> <ul style="list-style-type: none"> • Technical Bachelors or Masters Degree • AFIT/NPS Masters Degree Program • Education Within Industry (EWI) with research paper • 333 TRS – Enterprise Network Operations Course • 333 TRS – Communications Officer Warfighting Integration Education Course • OTR – Military Satellite Communications in a Netcentric, Transitional Communications World Course • OTR – Global Command and Control System Netcentric Family of Systems Leading to JC2 Course • OTR – IT Project Management Course • OTR – Advances in Telecommunications Course • AFIT – Systems Engineering Course <p><u>Certification Requirements:</u></p> <ul style="list-style-type: none"> • Expeditionary Communications Officer Training Course • AFSC 3-level upgrade (18 months) • At minimum 1 year in position • CFETP competency qualification based on position • Acquisition, Research & Development, and Modeling & Simulation Certification Course completion (projected on-line or in-residence course) • DAU APDP Comm-Computer Level 1 & 2 Certification (Acquisition Billet) <p><u>Potential Developmental Tours:</u></p> <ul style="list-style-type: none"> • System Program Office (62E, 63A) • Air Force Research Lab (62E, 63A) • DARPA Assignment • Intelligence (14N) • Space Operations (13S)
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<u>Space and Missile Systems (Tactical)</u>	<u>Expeditionary Operations (Tactical)</u>
<p><u>Knowledge:</u></p> <ul style="list-style-type: none"> • Defense, Joint, and Air Force Communications Instructions • Joint Technical Architecture Standards • JCIDS Process • Acquisition Process • Sustainment Standards • Global Information Grid Strategy • Accreditation and Certification Guidelines • C2 Constellation Net Strategy • Satellite (Transformational) Communications • Airborne Systems • Space and Missile Systems • Special Operations Systems • DoD Architecture Framework • Integration Guidelines • PPBE Process • Cryptographic Standards and Guidelines <p><u>Skills:</u></p> <ul style="list-style-type: none"> • Architecture Project Management • Systems Project Management • Engineering and Integration • Accreditation and Certification • Systems Engineering and Architecture Management • Warfighter Integration and F2T2EA Concepts • Contractor Program Management • Requirements Analysis • Acquisition Process Management • Program Element Monitor • Satellite Operations Management • Space Operations and Communications • Missile Communications • Knowledge Management <p><u>Abilities:</u></p> <ul style="list-style-type: none"> • Leadership • Problem Solving • Oral and Written Communication • Time and Resource Management • Cognitive Ability • Project Management • Strategic and Conceptual Thinking • Systems Thinking • Vision • Judgment • Integration 	<p><u>Knowledge:</u></p> <ul style="list-style-type: none"> • Defense, Joint, and Air Force Communications Instructions • Communications Infrastructure Standards • Voice and Data Networking Principles • Maintenance Standardization and Evaluation Program • Information Assurance • Information Systems Management • Base-level Resource and Budget Process • Joint Technical Architecture Standards • JCIDS Process • Acquisition Process • Sustainment Standards • C2 Constellation Net Strategy • Satellite (Transformational) Communications • Airborne Systems • Special Operations Systems • DoD Architecture Framework • Integration Guidelines • PPBE Process • Cryptographic Standards and Guidelines • Global Information Grid Strategy <p><u>Skills:</u></p> <ul style="list-style-type: none"> • Systems Project Management • Engineering and Integration • Accreditation and Certification • Information Assurance Management • Systems Engineering and Architecture Management • Warfighter Integration and F2T2EA Concepts • Frequency & Spectrum Management • Global Information Grid Circuit Management • Communications Maintenance Management • Contingency Planning and Management • Network Protection, Management and Restoration • Deployment and Mobility Management • Knowledge Technician/Engineering • Knowledge Management <p><u>Abilities:</u></p> <ul style="list-style-type: none"> • Leadership • Problem Solving • Oral and Written Communication • Time and Resource Management • Judgment

<p><u>Education & Training:</u></p> <ul style="list-style-type: none"> • Technical Bachelors or Masters Degree • AFIT/NPS Masters Degree Program • USMC Expeditionary Warfare School (EWS) • Education Within Industry (EWI) with research paper • 333 TRS – Space Education Course • 333 TRS – Enterprise Network Operations Course • 333 TRS – Communication Officer Warfighting Integration Education Course • OTR – Military Satellite Communications in a Netcentric, Transitional Communications World Course • OTR – Global Command and Control System Netcentric Family of Systems Leading to JC2 Course • OTR – Terrestrial and Wireless Networking and Trends Course • OTR – Advances in Telecommunications • OTR – Introduction to Netcentric Warfare Course • AFIT – Systems Engineering Course <p><u>Certification Requirements:</u></p> <ul style="list-style-type: none"> • Expeditionary Communications Officer Training Course • AFSC 3-level upgrade (18 months) • At minimum 1 year in position • CFETP competency qualification based on position • Space and Missile Systems Certification Course completion (projected on-line or in-residence course) • AFSPC Space 100 Course Certificate • DAU APDP Comm-Computer Level 1 & 2 Certification (Acquisition Billet) <p><u>Potential Developmental Tours:</u></p> <ul style="list-style-type: none"> • System Program Office (62E, 63A) • Air Force Research Lab (62E, 63A) • Space Operations (13S) 	<ul style="list-style-type: none"> • Cognitive Ability • Project Management • Personnel Evaluation • Integration • Vision • Systems Thinking • Strategic Thinking <p><u>Education & Training:</u></p> <ul style="list-style-type: none"> • Technical Bachelors or Masters Degree • USMC Expeditionary Warfare School (EWS) • 333 TRS – Communications Officer Deployable & Tactical Communications Education Course • 333 TRS – Communications Officer Warfighting Integration Education Course • AFCA – Planning & Implementation Seminar • OTR – Disaster Recovery Planning • OTR – Advances in Telecommunications • OTR – Introduction to Netcentric Warfare Course • USAF Special Operations School Courses • Contingency Wartime Planning Course <p><u>Certification Requirements:</u></p> <ul style="list-style-type: none"> • Expeditionary Communications Officer Training Course • AFSC 3-level upgrade (18 months) • At minimum 1 year in position • CFETP competency qualification based on position • Expeditionary Operations Certification Course completion (projected on-line or in-residence course) • Combat Communications School <p><u>Potential Developmental Tours:</u></p> <ul style="list-style-type: none"> • System Program Office (62E, 63A) • Air Force Research Lab (62E, 63A) • Space Operations (13S)
<p><u>Information and Knowledge Management</u> <i>(Tactical)</i></p> <p><u>Knowledge:</u></p> <ul style="list-style-type: none"> • Defense, Joint, and Air Force Communications Instructions • Joint Technical Architecture Standards • AF CIO Guidance • JCIDS Process • Acquisition Process 	<p><u>Standard Evaluation/Inspections</u> <i>(Tactical)</i></p> <p><u>Knowledge:</u></p> <ul style="list-style-type: none"> • Defense, Joint, and Air Force Communications Instructions • Communications Infrastructure Standards • Voice and Data Networking Principles • Maintenance Standardization and Evaluation Program

<ul style="list-style-type: none"> • Sustainment Standards • Global Information Grid Strategy • Accreditation and Certification Guidelines • C2 Constellation Net Strategy • Satellite (Transformational) Communications • Airborne Systems • Space and Missile Systems • Special Operations Systems • DoD Architecture Framework • Integration Guidelines • PPBE Process • Cryptographic Standards and Guidelines <p><u>Skills:</u></p> <ul style="list-style-type: none"> • Systems Project Management • Engineering and Integration • Accreditation and Certification • Systems Engineering and Architecture Management • Contractor Program Management • Requirements Analysis • Acquisition Process Management • Database Management • Portal and Webpage Management • Knowledge Management • Knowledge Technician/Engineering • Process Reengineering and Management <p><u>Abilities:</u></p> <ul style="list-style-type: none"> • Leadership • Problem Solving • Oral and Written Communication • Time and Resource Management • Cognitive Ability • Project Management • Strategic and Conceptual Thinking • Systems Thinking • Vision • Judgment <p><u>Education & Training:</u></p> <ul style="list-style-type: none"> • Technical Bachelors or Masters Degree • AFIT/NPS Masters Degree Program • Education Within Industry (EWI) with research paper • 333 TRS – Enterprise Network Operations Course • 333 TRS – Communications Officer Warfighting Integration Education Course • AFCA – Information Management Seminar • OTR – IT Project Management Course 	<ul style="list-style-type: none"> • Information Assurance • Information Systems Management • Base-level Resource and Budget Process • Global Information Grid Strategy • Accreditation and Certification Guidelines • C2 Constellation Net Strategy • Frequency Management • Satellite (Transformational) Communications • Airborne Networks • Space and Missile Systems • Special Operations Systems • DoD Architecture Framework • Integration Guidelines • Cryptographic Standards and Guidelines • Joint Technical Architecture Standards • AF CIO Guidance • Scenario Development • Inspection Criteria Development <p><u>Skills:</u></p> <ul style="list-style-type: none"> • Inspector • Scenario Development and Management • Contractor Program Management • Contract Surveillance • Systems Project Management • Engineering and Integration • Accreditation and Certification • Communications Maintenance Management • Base-level Contingency Planning and Management • Network Protection, Management and Restoration • Information and Records Management • Visual Information • Postal Management • Base-level Communications Engineering and Installation • Communications Resource Management • Frequency & Spectrum Management • Global Information Grid Circuit Management • Contingency Planning and Management • Deployment and Mobility Management • Satellite Operations Management • Space Operations and Communications • Missile Communications • Knowledge Management <p><u>Abilities:</u></p> <ul style="list-style-type: none"> • Leadership • Problem Solving
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<ul style="list-style-type: none"> • OTR – From Data Mgmt to Information Mgmt to Knowledge Mgmt Course • OTR – Introduction to Netcentric Warfare Course • AFIT Systems Engineering Course <p><u>Certification Requirements:</u></p> <ul style="list-style-type: none"> • Expeditionary Communications Officer Training Course • AFSC 3-level upgrade (18 months) • At minimum 1 year in position • CFETP competency qualification based on position • Information and Knowledge Management Certification Course completion (projected on-line or in-residence course) • DAU APDP Comm-Computer Level 1 & 2 Certification (Acquisition Billet) <p><u>Potential Developmental Tours:</u></p> <ul style="list-style-type: none"> • System Program Office (62E, 63A) • Space Operations (13S) • Intelligence (14N) 	<ul style="list-style-type: none"> • Oral and Written Communication • Time and Resource Management • Cognitive Ability • Project Management • Strategic and Conceptual Thinking • Systems Thinking • Vision • Judgment • Insight • Creativity <p><u>Education & Training:</u></p> <ul style="list-style-type: none"> • Technical Bachelors or Masters Degree • AFIT/NPS Masters Degree Program • 333 TRS – Communications Officer Warfighting Integration Education Course • OTR – Advances in Telecommunications Course • SAF/IG Inspector Course <p><u>Certification Requirements:</u></p> <ul style="list-style-type: none"> • Expeditionary Communications Officer Training Course • AFSC 3-level upgrade (18 months) • At minimum 1 year in position • CFETP competency qualification based on position • Standards Evaluation and Inspection Certification Course completion (projected on-line or in-residence course) <p><u>Potential Developmental Tours:</u> None</p>
<p><u>Information Operations/Assurance (Tactical)</u></p> <p><u>Knowledge:</u></p> <ul style="list-style-type: none"> • Defense, Joint, and Air Force Communications Instructions • Global Information Grid Strategy • Accreditation and Certification Guidelines • C2 Constellation Net Strategy • Frequency Management • Satellite (Transformational) Communications • Airborne Networks • Joint Tactical Radio System • DISA Operations • Overall Network Operations Security Center Strategy • DoD Architecture Framework • IO/IA/IP Policies and Guidance • Information Warfare Construct 	<p><u>Communications Engineering (Tactical)</u></p> <p><u>Knowledge:</u></p> <ul style="list-style-type: none"> • Defense, Joint, and Air Force Communications Instructions • Joint Technical Architecture Standards • JCIDS Process • Acquisition Process • Sustainment Standards • Global Information Grid Strategy • Accreditation and Certification Guidelines • C2 Constellation Net Strategy • Satellite (Transformational) Communications • Airborne Systems • Space and Missile Systems • Special Operations Systems • DoD Architecture Framework

<p><u>Skills:</u></p> <ul style="list-style-type: none"> • IO Tactics, Techniques and Procedures • Network and System Defense • Architecture Project Management • Frequency & Spectrum Management • Global Information Grid Circuit Management • Information Assurance Management • Regional Operations Security Center Management • Satellite Operations Management • Airborne Operations Management • Warfighter Integration and F2T2EA Concepts • Global Information Grid Strategy • Accreditation and Certification Guidelines • Knowledge Management <p><u>Abilities:</u></p> <ul style="list-style-type: none"> • Leadership • Problem Solving • Oral and Written Communication • Time and Resource Management • Cognitive Ability • Project Management • Strategic and Conceptual Thinking • Systems Thinking • Vision • Judgment • Insight • Integrating <p><u>Education & Training:</u></p> <ul style="list-style-type: none"> • Technical Bachelors or Masters Degree • AFIT/NPS Masters Degree Program • USMC Expeditionary Warfare School (EWS) • Education Within Industry (EWI) with research paper • 333 TRS – Communications Officer Information operations Course • 333 TRS – Enterprise Network Operations Course • 333 TRS – Communications Officer Warfighting Integration Education Course • OTR – System and Network Security Course • OTR – Information Assurance, Roadmap to Excellence Course • OTR – Introduction to Netcentric Warfare Course • OTR – Advances in Telecommunications <p><u>Certification Requirements:</u></p> <ul style="list-style-type: none"> • Expeditionary Communications Officer Training 	<ul style="list-style-type: none"> • Integration Guidelines • PPBE Process • Cryptographic Standards and Guidelines • Civil Engineering Standards <p><u>Skills:</u></p> <ul style="list-style-type: none"> • Engineering and Installation • System Project Management • System Engineering and Architecture Management • Architecture Project Management • Global Information Grid Circuit Management • Satellite Operations Management • Airborne Operations Management • Warfighter Integration and F2T2EA Concepts • Global Information Grid Strategy • Accreditation and Certification Guidelines • Contractor Program Management • Requirements Analysis • Acquisition Process Management • Knowledge Management <p><u>Abilities:</u></p> <ul style="list-style-type: none"> • Leadership • Problem Solving • Oral and Written Communication • Time and Resource Management • Cognitive Ability • Project Management • Strategic and Conceptual Thinking • Systems Thinking • Vision • Judgment • Insight • Integrating <p><u>Education & Training:</u></p> <ul style="list-style-type: none"> • Technical Bachelors or Masters Degree • AFIT/NPS Masters Degree Program • USMC Expeditionary Warfare School (EWS) • Education Within Industry (EWI) with research paper • 333 TRS – Enterprise Network Operations Course • 333 TRS – Communications Officer Warfighting Integration Education Course • AFCA – Project Planning Seminar • OTR – IT Project Management Course • OTR – Terrestrial and Wireless Networking and Trends Course
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<p>Course</p> <ul style="list-style-type: none"> • AFSC 3-level upgrade (18 months) • At minimum 1 year in position • CFETP competency qualification based on position • Information Operations & Assurance Certification Course completion (projected on-line or in-residence course) • Network Warfare Operations Basic Level Course <p><u>Potential Developmental Tour:</u></p> <ul style="list-style-type: none"> • Projected IO or Cyberspace Career Field • System Program Office (63A) • Space Operations (13S) • Intelligence (14N) 	<ul style="list-style-type: none"> • OTR – Advances in Telecommunications <p><u>Certification Requirements:</u></p> <ul style="list-style-type: none"> • Expeditionary Communications Officer Training Course with Engineering Sequence • AFSC 3-level upgrade (18 months) • At minimum 1 year in position • CFETP competency qualification based on position • Communications Engineering Certification Course completion (projected on-line or in-residence course) • DAU APDP Comm-Computer Level 1 & 2 Certification (Acquisition Billet) <p><u>Potential Developmental Tour:</u></p> <ul style="list-style-type: none"> • System Program Office (63A) • Air Force Research Lab (62E) • DARPA
<p><u>Software Engineering</u> (Tactical)</p> <p><u>Knowledge:</u></p> <ul style="list-style-type: none"> • Defense, Joint, and Air Force Communications Instructions • Joint Technical Architecture Standards • JCIDS Process • Acquisition Process • Sustainment Standards • Global Information Grid Strategy • Accreditation and Certification Guidelines • C2 Constellation Net Strategy • Satellite (Transformational) Communications • Airborne Systems • Space and Missile Systems • Special Operations Systems • DoD Architecture Framework • Architecture Tools • Object Oriented Analysis and Design • Integration Guidelines • PPBE Process • Cryptographic Standards and Guidelines <p><u>Skills:</u></p> <ul style="list-style-type: none"> • Software Engineering Management • Engineering and Integration • Accreditation and Certification • Object Oriented Analysis and Design • Contractor Program Management • Requirements Analysis 	<p><u>Air Operations Systems Management</u> (Tactical)</p> <p><u>Knowledge:</u></p> <ul style="list-style-type: none"> • Defense, Joint, and Air Force Communications Instructions • Joint Technical Architecture Standards • JCIDS Process • Acquisition Process • Sustainment Standards • Global Information Grid Strategy • Accreditation and Certification Guidelines • C2 Constellation Net Strategy • Satellite (Transformational) Communications • Airborne Systems • Space and Missile Systems • Special Operations Systems • DoD Architecture Framework • Integration Guidelines • PPBE Process • Cryptographic Standards and Guidelines <p><u>Skills:</u></p> <ul style="list-style-type: none"> • Architecture Project Management • Systems Project Management • Engineering and Integration • Accreditation and Certification • Systems Engineering and Architecture Management • Warfighter Integration and F2T2EA Concepts • Contractor Program Management

<ul style="list-style-type: none"> • Acquisition Process Management • Program Element Monitor • Systems Project Management • Systems Engineering and Architecture Management • Process Reengineering and Management • Knowledge Management • Knowledge Technician/Engineering <p><u>Abilities:</u></p> <ul style="list-style-type: none"> • Leadership • Problem Solving • Oral and Written Communication • Time and Resource Management • Cognitive Ability • Project Management • Strategic and Conceptual Thinking • Systems Thinking • Vision • Judgment • Integration <p><u>Education & Training:</u></p> <ul style="list-style-type: none"> • Technical Bachelors or Masters Degree • AFIT/NPS Masters Degree Program • Education Within Industry (EWI) with research paper • 333 TRS – Enterprise Network Operations Course • 333 TRS – Communications Officer Warfighting Integration Education Course • AFCA – Project Planning Seminar • OTR – System and Network Security Course • OTR – IT Project Management Course • OTR – Advances in Telecommunications Course • AFIT – Systems Engineering Course <p><u>Certification Requirements:</u></p> <ul style="list-style-type: none"> • Expeditionary Communications Officer Training Course • AFSC 3-level upgrade (18 months) • At minimum 1 year in position • CFETP competency qualification based on position • Software Engineering Certification Course completion (projected on-line or in-residence course) • DAU APDP Comm-Computer Level 1 & 2 Certification (Acquisition Billet) <p><u>Potential Developmental Tours:</u></p>	<ul style="list-style-type: none"> • Requirements Analysis • Acquisition Process Management • Program Element Monitor • Air Operations Center Systems Management • Air Operations and Communications • Knowledge Management <p><u>Abilities:</u></p> <ul style="list-style-type: none"> • Leadership • Problem Solving • Oral and Written Communication • Time and Resource Management • Cognitive Ability • Project Management • Strategic and Conceptual Thinking • Systems Thinking • Vision • Judgment • Integration <p><u>Education & Training:</u></p> <ul style="list-style-type: none"> • Technical Bachelors or Masters Degree • AFIT/NPS Masters Degree Program • USMC Expeditionary Warfare School (EWS) • Education Within Industry (EWI) with research paper • 333 TRS – Enterprise Network Operations Course • 333 TRS – Communications Officer Warfighting Integration Education Course • OTR – Global Command and Control System Netcentric Family of Systems Leading to JC2 Course • OTR – Introduction to Netcentric Warfare Course • OTR – Advances in Telecommunications Course • OTR – IT Project Management Course • AFIT – Systems Engineering Course <p><u>Certification Requirements:</u></p> <ul style="list-style-type: none"> • Expeditionary Communications Officer Training Course • AFSC 3-level upgrade (18 month) • At minimum 1 year in position • CFETP competency qualification based on position • Air Operation Systems Certification Course completion (projected on-line or in-residence course) • DAU APDP Comm-Computer Level 1 & 2 Certification (Acquisition Billet)
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<ul style="list-style-type: none"> • System Program Office (63A) • Intelligence (14N) • Space Operations (13S) 	<p><u>Potential Developmental Tours:</u></p> <ul style="list-style-type: none"> • System Program Office (62E, 63A) • Air Force Research Lab (62E, 63A)
<p><u>Plans and Programs</u> (Tactical)</p> <p><u>Knowledge:</u></p> <ul style="list-style-type: none"> • Defense, Joint, and Air Force Communications Instructions • Global Information Grid Strategy • Accreditation and Certification Guidelines • C2 Constellation Net Strategy • Frequency Management • Satellite (Transformational) Communications • Airborne Networks • DISA Operations • Overall Network Operations Security Center Strategy • DoD Architecture Framework • JCIDS Process • Acquisition Process • Sustainment Standards • Space and Missile Systems • Special Operations Systems • Integration Guidelines • PPBE Process • Cryptographic Standards and Guidelines • Source Selection Policy and Guidance • Joint Technical Architecture Standards • Program Element Monitor • Manpower and Personnel Systems <p><u>Skills:</u></p> <ul style="list-style-type: none"> • Contractor Management • Communications Engineering and Installation • Communications Resource Management • Contingency Planning and Management • Warfighter Integration and F2T2EA Concepts • Systems Project Management • Engineering and Integration • Requirements Analysis • Acquisition Process Management • Program Element Monitor • Manpower and Personnel Management • Deployment and Mobility Management • Knowledge Strategy • Knowledge Management <p><u>Abilities:</u></p> <ul style="list-style-type: none"> • Leadership 	<p><u>Executive Officer</u> (Operational and Tactical)</p> <p><u>Knowledge:</u></p> <ul style="list-style-type: none"> • Defense, Joint, and Air Force Communications Instructions • Global Information Grid Strategy • C2 Constellation Net Strategy • Satellite (Transformational) Communications • JCIDS Process • Acquisition Process • PPBE Process • Source Selection Policy and Guidance • Joint Technical Architecture Standards • Program Element Monitor • Manpower and Personnel Systems • Public Affairs • Protocol • Electronic Staffing • Speech Writing <p><u>Skills:</u></p> <ul style="list-style-type: none"> • Speech Writing • Task Management • Distinguished Visitor Itineraries • Public Affairs Management • Staffing Skills • Correspondence Editing • Performance Reporting Editing • Acquisition and Contract Review • Knowledge Management <p><u>Abilities:</u></p> <ul style="list-style-type: none"> • Leadership • Problem Solving • Oral and Written Communication • Time and Resource Management • Cognitive Ability • Project Management • Strategic and Conceptual Thinking • Systems Thinking • Vision • Integration <p><u>Education & Training:</u></p> <ul style="list-style-type: none"> • Technical Bachelors or Masters Degree • AFIT/NPS Masters Degree Program

<ul style="list-style-type: none"> • Problem Solving • Oral and Written Communication • Time and Resource Management • Cognitive Ability • Project Management • Strategic and Conceptual Thinking • Creativity • Systems Thinking • Vision • Integration <p><u>Education & Training:</u></p> <ul style="list-style-type: none"> • Technical Bachelors or Masters Degree • AFIT/NPS Masters Degree Program • USMC Expeditionary Warfare School (EWS) • Education Within Industry (EWI) with research paper • 333 TRS – Enterprise Network Operations Course • 333 TRS – Communications Officer Warfighting Integration Education Course • AFCA – Plans & Programs Seminar • AFCA – Project Planning Seminar • OTR – IT Project Management Course • OTR – Introduction to Netcentric Warfare Course • OTR – Advances in Telecommunications Course • AFIT – Systems Engineering Course • Contingency Wartime Planning Course <p><u>Certification Requirements:</u></p> <ul style="list-style-type: none"> • Expeditionary Communications Officer Training Course • AFSC 3-level upgrade (18 months) • At minimum 1 year in position • CFETP competency qualification based on position • Plans and Programs Certification Course completion (projected on-line or in-residence course) • DAU APDP Comm-Computer Level 1 & 2 Certification (Acquisition Billet) <p><u>Potential Developmental Tour:</u></p> <ul style="list-style-type: none"> • System Program Office (63A) • Intelligence (14N) • Space Operations (13S) • Logistics Readiness Squadron (Logistics Planner – 21R) 	<ul style="list-style-type: none"> • 333 TRS – Executive Officer Course • 333 TRS – Communications Officer Warfighting Integration Education Course • Air Force Protocol Course • OTR – Advances in Telecommunications Course <p><u>Certification Requirements:</u></p> <ul style="list-style-type: none"> • Expeditionary Communications Officer Training Course • AFSC 3-level upgrade (18 months) • At minimum 1 year in position • CFETP competency qualification based on position • Executive Officer Certification Course completion (projected on-line or in-residence course) <p><u>Potential Developmental Tour:</u></p> <ul style="list-style-type: none"> • Executive Officer (97E)
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<u>Special Duty Assignment (Tactical and Operational)</u>	<u>Garrison Operations (Operational)</u>
<p>Note: When sending communications officers to special duty assignment, must have a plan for re-immersion upon completion of special duty tour.</p> <p><u>Knowledge:</u></p> <ul style="list-style-type: none"> • Defense, Joint, and Air Force Communications Instructions • Career Field Knowledge in Applicable Communications Areas • Department of Defense and Air Force Corporate Structure • Leadership and Management Practices • *Dependent on Special Duty Assignment <p><u>Skills:</u></p> <ul style="list-style-type: none"> • *Dependent on Special Duty Assignment <p><u>Abilities:</u></p> <ul style="list-style-type: none"> • Leadership • Problem Solving • Oral and Written Communication • Time and Resource Management • Cognitive Ability • Project Management • Strategic and Conceptual Thinking • Systems Thinking • Vision <p><u>Education & Training:</u></p> <ul style="list-style-type: none"> • Technical Bachelors or Masters Degree • AFIT/NPS Masters Degree Program • Expeditionary Communications Officer Training • Air Force Communication Officer Training Courses (dependent on mission area and real-time requirements) • AFCA Officer Technical Refresher Courses (dependent on mission area) <p><u>Certifications:</u></p> <ul style="list-style-type: none"> • Dependent on Special Duty Assignment <p><u>Potential Developmental Tour:</u> None</p>	<p><u>Knowledge:</u></p> <ul style="list-style-type: none"> • Defense, Joint, and Air Force Communications Instructions • Communications Infrastructure Standards • Voice and Data Networking Principles • Maintenance Standardization and Evaluation Program • Information Assurance • Information Systems Management • Base-level Resource and Budget Process • Commander/Leadership Responsibilities • Base-level Future Plans <p><u>Skills:</u></p> <ul style="list-style-type: none"> • Communications Maintenance Management • Base-level Contingency Planning and Management • Network Protection, Management and Restoration Policy • Information and Records Management • Contractor Management • Base-level Communications Engineering and Installation • Communications Resource Management • Knowledge Leadership • Knowledge Manager <p><u>Abilities:</u></p> <ul style="list-style-type: none"> • Leadership • Problem Solving • Oral and Written Communication • Time and Resource Management • Judgment • Cognitive Ability • Project Management • Personnel Evaluation <p><u>Education & Training:</u></p> <ul style="list-style-type: none"> • Technical Bachelors or Masters Degree • AFIT/NPS Masters Degree Program • Education Within Industry (EWI) with research paper • 333 TRS – Communications Officer Warfighting Integration Education Course • OTR – Introduction to Netcentric Warfare Course • OTR – Advances in Telecommunications Course <p><u>Certification Requirements:</u></p> <ul style="list-style-type: none"> • Communications Battlespace Management

	<p>Course</p> <ul style="list-style-type: none"> • AFSC 4-level upgrade (upon assignment to position) • At minimum 1 year in position • CFETP competency qualification based on position • Advanced Garrison Operations Certification Course completion (projected on-line or in-residence course) <p><u>Potential Developmental Tours:</u></p> <ul style="list-style-type: none"> • None
<p><u>Acquisition Management</u> <i>(Operational)</i></p> <p><u>Knowledge:</u></p> <ul style="list-style-type: none"> • Defense, Joint, and Air Force Communications Instructions • Acquisition Process • JCIDS Process • PPBE Process • DoD Architecture Framework • Architecture Tools • Object Oriented Analysis and Design • Integration Guidelines • Source Selection Policy and Guidance • Joint Technical Architecture Standards • Air Force Materiel Command Operations • Sustainment Standards • Global Information Grid Strategy • Accreditation and Certification Guidelines • C2 Constellation Net Strategy • Satellite (Transformational) Communications • Airborne Systems • Space and Missile Systems • Special Operations Systems • Cryptographic Standards and Guidelines <p><u>Skills:</u></p> <ul style="list-style-type: none"> • Contractor Program Management • Contract Development and Modification • DoD and AF Acquisition Process Management • Systems Engineering and Architecture Management • Engineering and Integration • System Program Management • Accreditation and Certification • Requirements Analysis • Cost Analysis • Knowledge Leadership 	<p><u>C4ISR Networks</u><i>(Operational)</i></p> <p><u>Knowledge:</u></p> <ul style="list-style-type: none"> • Defense, Joint, and Air Force Communications Instructions • Joint Technical Architecture Standards • JCIDS Process • Acquisition Process • Sustainment Standards • Global Information Grid Strategy • Accreditation and Certification Guidelines • C2 Constellation Net Strategy • Satellite (Transformational) Communications • Airborne Systems • Space and Missile Systems • Special Operations Systems • DoD Architecture Framework • Integration Guidelines • PPBE Process • Cryptographic Standards and Guidelines <p><u>Skills:</u></p> <ul style="list-style-type: none"> • Systems Project Management • Engineering and Integration • Accreditation and Certification • Systems Engineering and Architecture Management • Warfighter Integration and F2T2EA Concepts • Contractor Program Management • Requirements Analysis • Acquisition Process Management • Knowledge Leadership • Frequency and Spectrum Management • Satellite Operations Management • Airborne Operations Management • Information Assurance Management

<ul style="list-style-type: none"> • Knowledge Management • Modeling and Simulation Practices • Research and Development Policy • Test and Evaluation Policy <p><u>Abilities:</u></p> <ul style="list-style-type: none"> • Leadership • Problem Solving • Oral and Written Communication • Time and Resource Management • Cognitive Ability • Project Management • Strategic and Conceptual Thinking • Systems Thinking • Vision • Judgment • Integration <p><u>Education & Training:</u></p> <ul style="list-style-type: none"> • Technical Bachelors or Masters Degree • AFIT/NPS Masters Degree Program • Education Within Industry (EWI) with research paper • 333 TRS – Communications Officer Warfighting Integration Education Course • OTR – Military Satellite Communications in a Netcentric, Transitional Communications World Course • OTR – Global Command and Control System Netcentric Family of Systems Leading to JC2 Course • OTR – IT Project Management Course • OTR – Advances in Telecommunications Course • AFIT – Systems Engineering Course <p><u>Certification Requirements:</u></p> <ul style="list-style-type: none"> • Communications Battlespace Management Course • AFSC 4-level upgrade (upon assignment to position) • At minimum 1 year in position • CFETP competency qualification based on position • Advanced Acquisition Management Certification Course completion (projected on-line or in-residence course) • DAU APDP Comm-Computer Level 1, 2 & 3 Certification (Acquisition Billet) <p><u>Potential Developmental Tours:</u></p> <ul style="list-style-type: none"> • System Program Office (62E, 63A) 	<p><u>Abilities:</u></p> <ul style="list-style-type: none"> • Leadership • Problem Solving • Oral and Written Communication • Time and Resource Management • Cognitive Ability • Project Management • Strategic and Conceptual Thinking • Systems Thinking • Vision • Judgment <p><u>Education & Training:</u></p> <ul style="list-style-type: none"> • Technical Bachelors or Masters Degree • AFIT/NPS Masters Degree Program • USMC Expeditionary Warfare School (EWS) • Education Within Industry (EWI) with research paper • 333 TRS – Enterprise Network Operations Course • 333 TRS – Communications Officer Warfighting Integration Education Course • OTR – Global Command and Control System Netcentric Family of Systems Leading to JC2 Course • OTR – Introduction to Netcentric Warfare Course • OTR – Terrestrial and Wireless Networking and Trends Course • OTR – Advances in Telecommunications Course • AFIT – Systems Engineering Course • AOC Initial Qualification Training Communications Course • Command and Control Warrior Advance Course <p><u>Certification Requirements:</u></p> <ul style="list-style-type: none"> • Communications Battlespace Management Course • AFSC 4-level upgrade (upon assignment to position) • At minimum 1 year in position • CFETP competency qualification based on position • Advanced C4ISR Systems Certification Course completion (projected on-line or in-residence course) • DAU APDP Comm-Computer Level 1, 2 & 3 Certification (Acquisition Billet) <p><u>Potential Developmental Tours:</u></p> <ul style="list-style-type: none"> • System Program Office (62E, 63A) • Intelligence (14N)
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<ul style="list-style-type: none"> • Intelligence (14N) • Space Operations (13S) 	<ul style="list-style-type: none"> • Space Operations (13S)
<p><u>Netcentric Operations</u> (Operational)</p> <p><u>Knowledge:</u></p> <ul style="list-style-type: none"> • Defense, Joint, and Air Force Communications Instructions • Global Information Grid Strategy • Accreditation and Certification Guidelines • C2 Constellation Net Strategy • Frequency Management • Satellite (Transformational) Communications • Airborne Networks • Joint Tactical Radio System • DISA Operations • Overall Network Operations Security Center Strategy • DoD Architecture Framework <p><u>Skills:</u></p> <ul style="list-style-type: none"> • Architecture Project Management • IO Tactics, Techniques and Procedures • Network and System Defense • Frequency & Spectrum Management • Global Information Grid Circuit Management • Information Assurance Management • Regional Operations Security Center Management • Satellite Operations Management • Airborne Operations Management • Warfighter Integration and F2T2EA Concepts • Knowledge Leadership • Knowledge Management <p><u>Abilities:</u></p> <ul style="list-style-type: none"> • Leadership • Problem Solving • Oral and Written Communication • Time and Resource Management • Cognitive Ability • Project Management • Strategic and Conceptual Thinking • Creativity • Systems Thinking <p>Vision</p> <p><u>Education & Training:</u></p> <ul style="list-style-type: none"> • Technical Bachelors or Masters Degree • AFIT/NPS Masters Degree Program 	<p><u>Plans and Programs</u> (Operational)</p> <p><u>Knowledge:</u></p> <ul style="list-style-type: none"> • Defense, Joint, and Air Force Communications Instructions • Global Information Grid Strategy • Accreditation and Certification Guidelines • C2 Constellation Net Strategy • Frequency Management • Satellite (Transformational) Communications • Airborne Networks • DISA Operations • Overall Network Operations Security Center Strategy • DoD Architecture Framework • JCIDS Process • Acquisition Process • Sustainment Standards • Space and Missile Systems • Special Operations Systems • Integration Guidelines • PPBE Process • Cryptographic Standards and Guidelines • Source Selection Policy and Guidance • Joint Technical Architecture Standards • Program Element Monitor • Manpower and Personnel Systems <p><u>Skills:</u></p> <ul style="list-style-type: none"> • Contractor Management • Communications Engineering and Installation • Communications Resource Management • Contingency Planning and Management • Warfighter Integration and F2T2EA Concepts • Systems Project Management • Engineering and Integration • Requirements Analysis • Acquisition Process Management • Program Element Monitor • Manpower and Personnel Management • Deployment and Mobility Management • Knowledge Strategy • Knowledge Management <p><u>Abilities:</u></p> <ul style="list-style-type: none"> • Leadership • Problem Solving

<ul style="list-style-type: none"> • USMC Expeditionary Warfare School (EWS) • Education Within Industry (EWI) with research paper • 333 TRS – Communications Officer Information operations Course • 333 TRS – Enterprise Network Operations Course • 333 TRS – Communications Officer Warfighting Integration Education Course • OTR – System and Network Security Course • OTR – Information Assurance, Roadmap to Excellence Course • OTR – Introduction to Netcentric Warfare Course • OTR – Advances in Telecommunications • Information Operations Fundamental Course • Information Operations Integration Course <p><u>Certification Requirements:</u></p> <ul style="list-style-type: none"> • Communications Battlespace Management Course • AFSC 4-level upgrade (upon assignment to position) • At minimum 1 year in position • CFETP competency qualification based on position • Advanced Netcentric Operations Certification Course completion (projected on-line or in-residence course) • Network Warfare Operations Basic Level Course and Network Warfare Operations School Intermediate Level Course • DAU APDP Comm-Computer Level 1, 2, & 3 Certification (Acquisition Billet) <p><u>Potential Developmental Tour:</u></p> <ul style="list-style-type: none"> • Projected IO or Cyberspace Career Field • System Program Office (63A) • Space Operations (13S) • Intelligence (14N) 	<ul style="list-style-type: none"> • Oral and Written Communication • Time and Resource Management • Cognitive Ability • Project Management • Strategic and Conceptual Thinking • Creativity • Systems Thinking • Vision • Integration <p><u>Education & Training:</u></p> <ul style="list-style-type: none"> • Technical Bachelors or Masters Degree • AFIT/NPS Masters Degree Program • USMC Expeditionary Warfare School (EWS) • Education Within Industry (EWI) with research paper • 333 TRS – Enterprise Network Operations Course • 333 TRS – Communications Officer Warfighting Integration Education Course • OTR – IT Project Management Course • OTR – Introduction to Netcentric Warfare Course • OTR – Advances in Telecommunications Course • AFIT – Systems Engineering Course • Contingency Wartime Planning Course • Command and Control Warrior Advance Course <p><u>Certification Requirements:</u></p> <ul style="list-style-type: none"> • Communications Battlespace Management Course • AFSC 4-level upgrade (upon assignment to position) • At minimum 1 year in position • CFETP competency qualification based on position • Advanced Plans and Programs Certification Course completion (projected on-line or in-residence course) • DAU APDP Comm-Computer Level 1, 2, & 3 Certification (Acquisition Billet) <p><u>Potential Developmental Tour:</u></p> <ul style="list-style-type: none"> • System Program Office (63A) • Intelligence (14N) • Space Operations (13S)
<p align="center"><u>Expeditionary Operations (Operational)</u></p> <p><u>Knowledge:</u></p> <ul style="list-style-type: none"> • Defense, Joint, and Air Force Communications Instructions 	<p align="center"><u>Information Systems Management (Operational)</u></p> <p><u>Knowledge:</u></p> <ul style="list-style-type: none"> • Defense, Joint, and Air Force Communications Instructions

<ul style="list-style-type: none"> • Communications Infrastructure Standards • Voice and Data Networking Principles • Maintenance Standardization and Evaluation Program • Information Assurance • Information Systems Management • Base-level Resource and Budget Process • Joint Technical Architecture Standards • JCIDS Process • Acquisition Process • Sustainment Standards • C2 Constellation Net Strategy • Satellite (Transformational) Communications • Airborne Systems • Special Operations Systems • DoD Architecture Framework • Integration Guidelines • PPBE Process • Cryptographic Standards and Guidelines • Global Information Grid Strategy <p><u>Skills:</u></p> <ul style="list-style-type: none"> • Systems Project Management • Engineering and Integration • Accreditation and Certification • Information Assurance Management • Systems Engineering and Architecture Management • Warfighter Integration and F2T2EA Concepts • Frequency & Spectrum Management • Global Information Grid Circuit Management • Communications Maintenance Management • Contingency Planning and Management • Network Protection, Management and Restoration • Deployment and Mobility Management • Knowledge Technician/Engineering • Knowledge Management <p><u>Abilities:</u></p> <ul style="list-style-type: none"> • Leadership • Problem Solving • Oral and Written Communication • Time and Resource Management • Judgment • Cognitive Ability • Project Management • Personnel Evaluation • Integration • Vision • Systems Thinking 	<ul style="list-style-type: none"> • Joint Technical Architecture Standards • AF CIO Guidance • JCIDS Process • Acquisition Process • Sustainment Standards • Global Information Grid Strategy • Accreditation and Certification Guidelines • C2 Constellation Net Strategy • Satellite (Transformational) Communications • Airborne Systems • Space and Missile Systems • Special Operations Systems • DoD Architecture Framework • Integration Guidelines • PPBE Process • Cryptographic Standards and Guidelines <p><u>Skills:</u></p> <ul style="list-style-type: none"> • Systems Project Management • Engineering and Integration • Global Information Grid Strategy • Enterprise System Strategy • DISA Strategy • Accreditation and Certification • Information Assurance Management • Network and System Defense • IO Tactics, Techniques and Procedures • Systems Engineering and Architecture Management • Contractor Program Management • Requirements Analysis • Acquisition Process Management • Database Management • Portal and Webpage Management • Knowledge Strategy • Knowledge Management • Knowledge Technician/Engineering • Process Reengineering and Management <p><u>Abilities:</u></p> <ul style="list-style-type: none"> • Leadership • Problem Solving • Oral and Written Communication • Time and Resource Management • Cognitive Ability • Project Management • Strategic and Conceptual Thinking • Systems Thinking • Vision • Judgment
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<ul style="list-style-type: none"> • Strategic Thinking <p><u>Education & Training:</u></p> <ul style="list-style-type: none"> • Technical Bachelors or Masters Degree • USMC Expeditionary Warfare School (EWS) • 333 TRS – Communications Officer Deployable & Tactical Communications Education Course • 333 TRS – Communications Officer Warfighting Integration Education Course • OTR – Disaster Recovery Planning • OTR – Advances in Telecommunications • OTR – Introduction to Netcentric Warfare Course • USAF Special Operations School Courses • Contingency Wartime Planning Course <p><u>Certification Requirements:</u></p> <ul style="list-style-type: none"> • Communications Battlespace Management Course • AFSC 4-level upgrade (upon assignment to position) • At minimum 1 year in position • CFETP competency qualification based on position • Advanced Expeditionary Operations Certification Course completion (projected on-line or in-residence course) • Combat Communications School <p><u>Potential Developmental Tours:</u></p> <ul style="list-style-type: none"> • None 	<p><u>Education & Training:</u></p> <ul style="list-style-type: none"> • Technical Bachelors or Masters Degree • AFIT/NPS Masters Degree Program • Education Within Industry (EWI) with research paper • 333 TRS – Enterprise Network Operations Course • 333 TRS – Communications Officer Warfighting Integration Education Course • AFCA – Information Management Seminar • OTR – IT Project Management Course • OTR – From Data Mgmt to Information Mgmt to Knowledge Mgmt Course • OTR – Introduction to Netcentric Warfare Course • AFIT Systems Engineering Course <p><u>Certification Requirements:</u></p> <ul style="list-style-type: none"> • Communications Battlespace Management Course • AFSC 4-level upgrade (upon assignment to position) • At minimum 1 year in position • CFETP competency qualification based on position • Advanced Information and Knowledge Management Certification Course completion (projected on-line or in-residence course) • DAU APDP Comm-Computer Level 1, 2, & 3 Certification (Acquisition Billet) <p><u>Potential Developmental Tours:</u></p> <ul style="list-style-type: none"> • System Program Office (62E, 63A) • Space Operations (13S) • Intelligence (14N)
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Appendix B: Capability – Competency Mapping

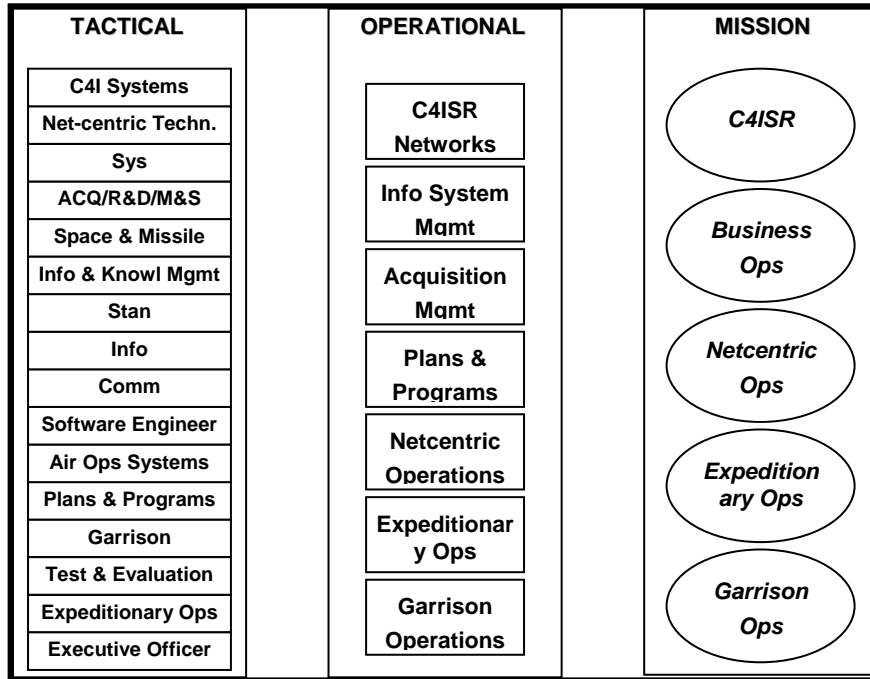


Diagram 1: Competencies and Mission Capabilities

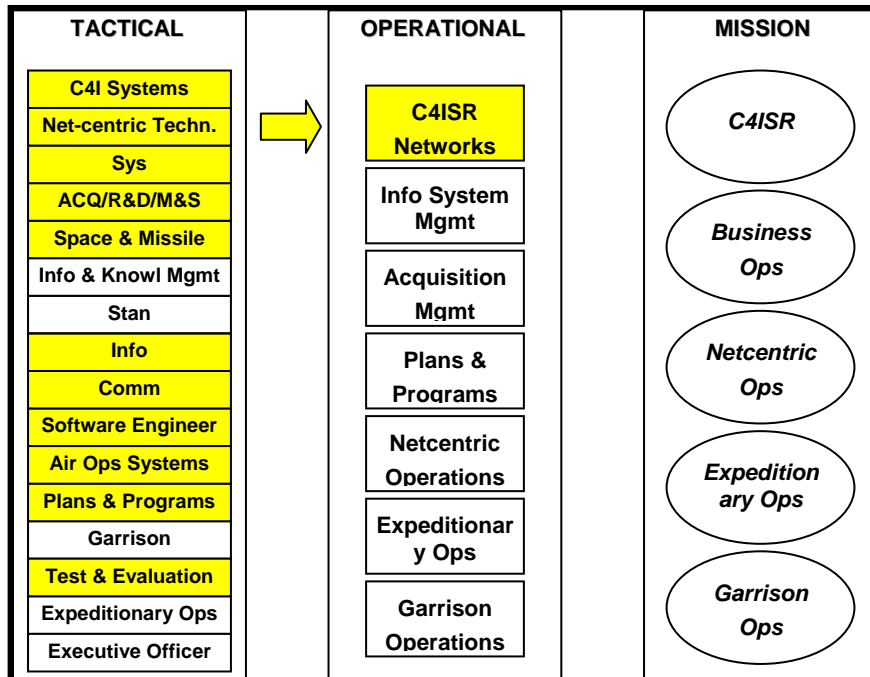


Diagram 2: Tactical Competencies mapped to C4ISR Networks

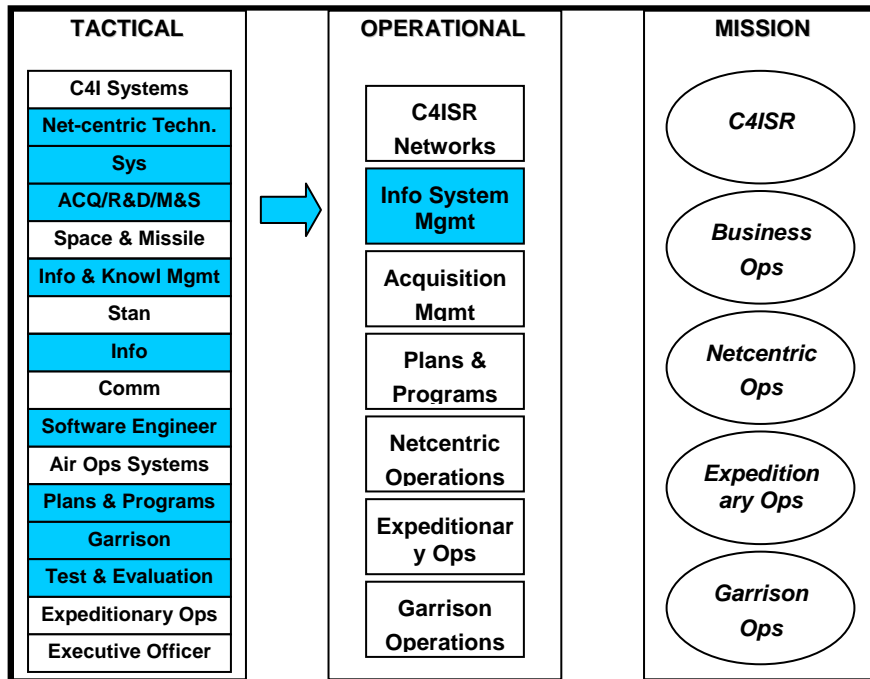


Diagram 3: Tactical Competencies mapped to Information Systems Management

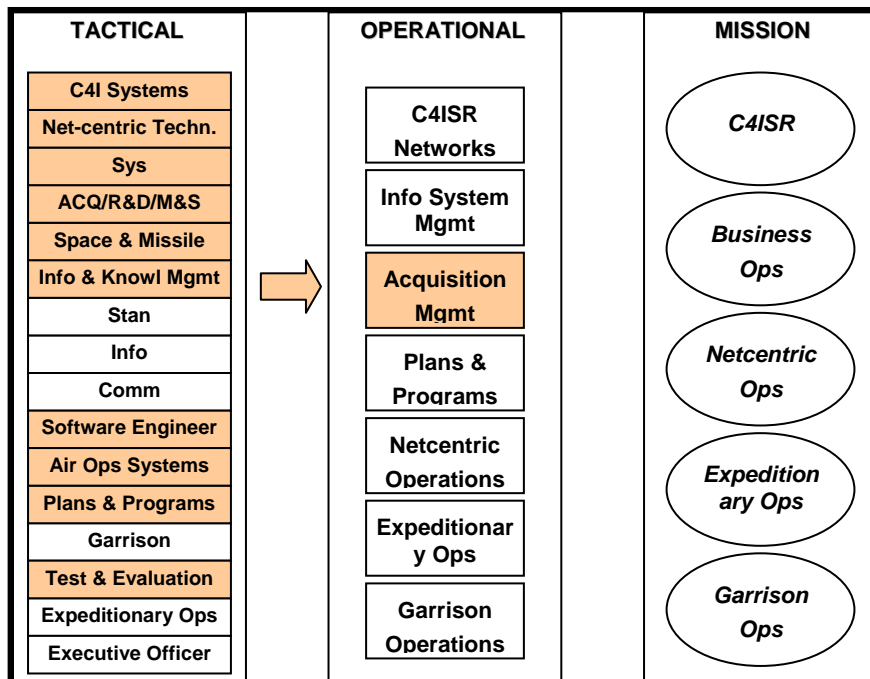


Diagram 4: Tactical Competencies mapped to Acquisition Management

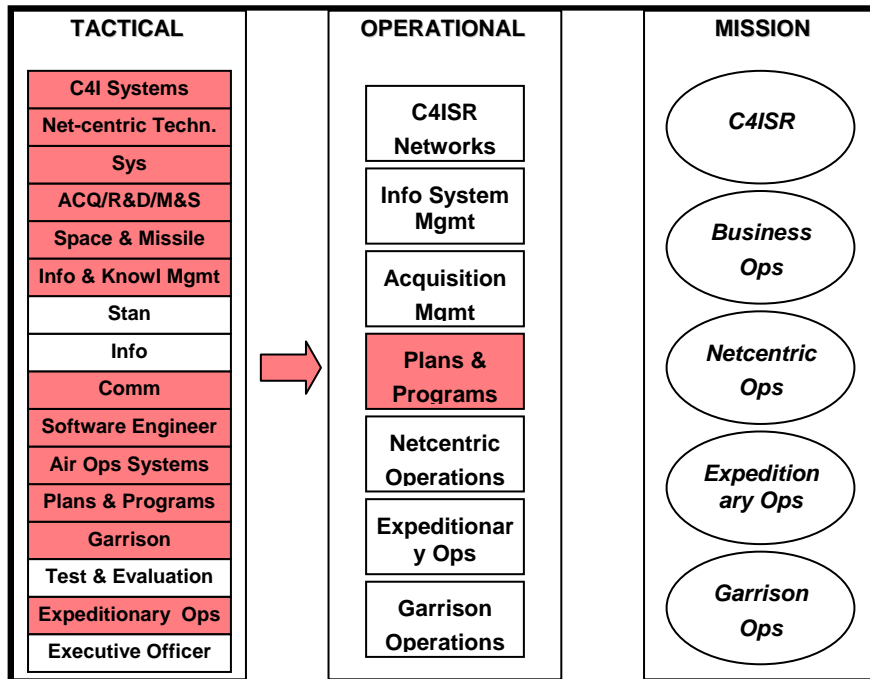


Diagram 5: Tactical Competencies mapped to Plans & Programs

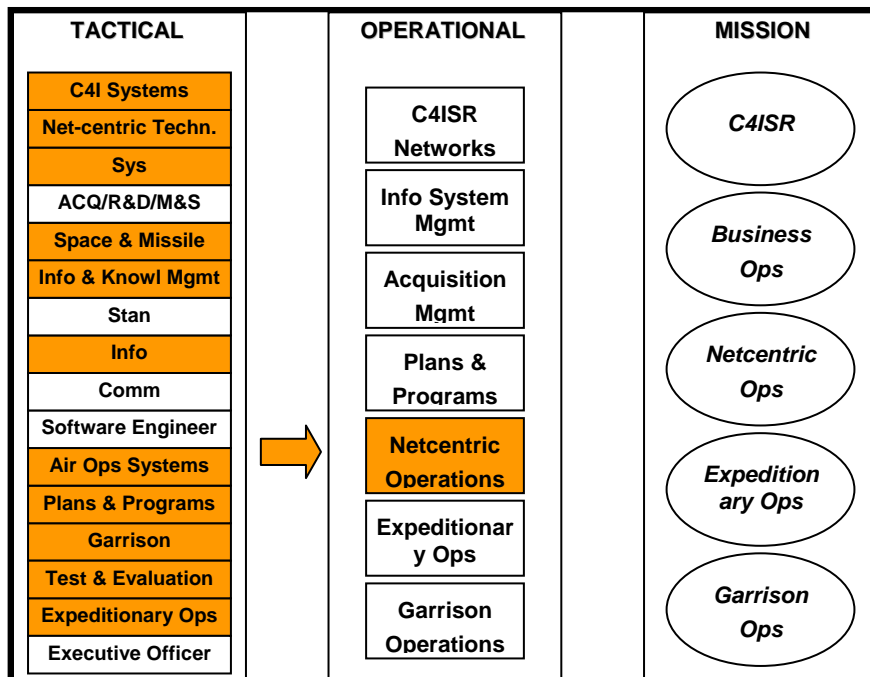
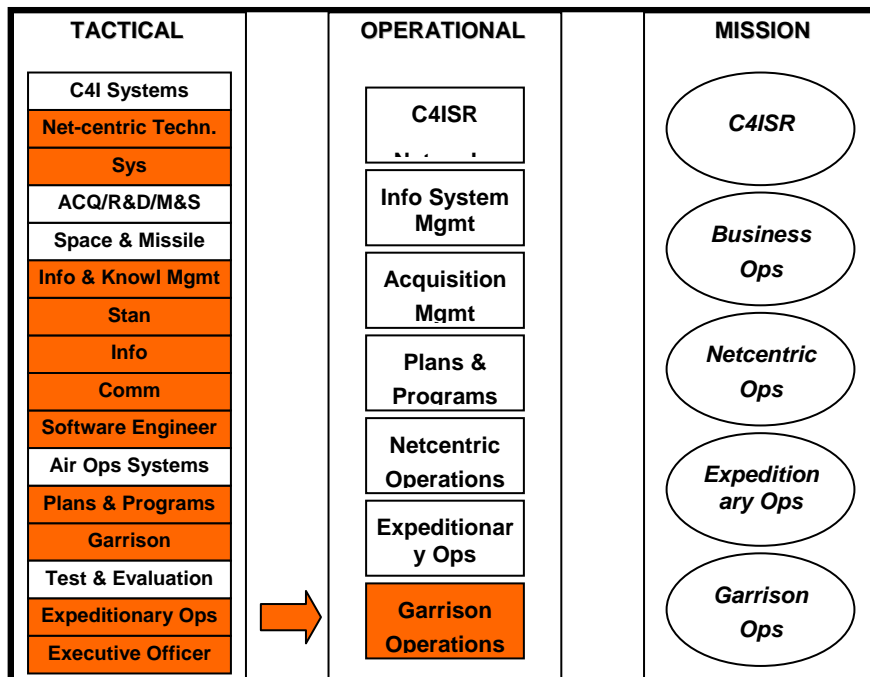
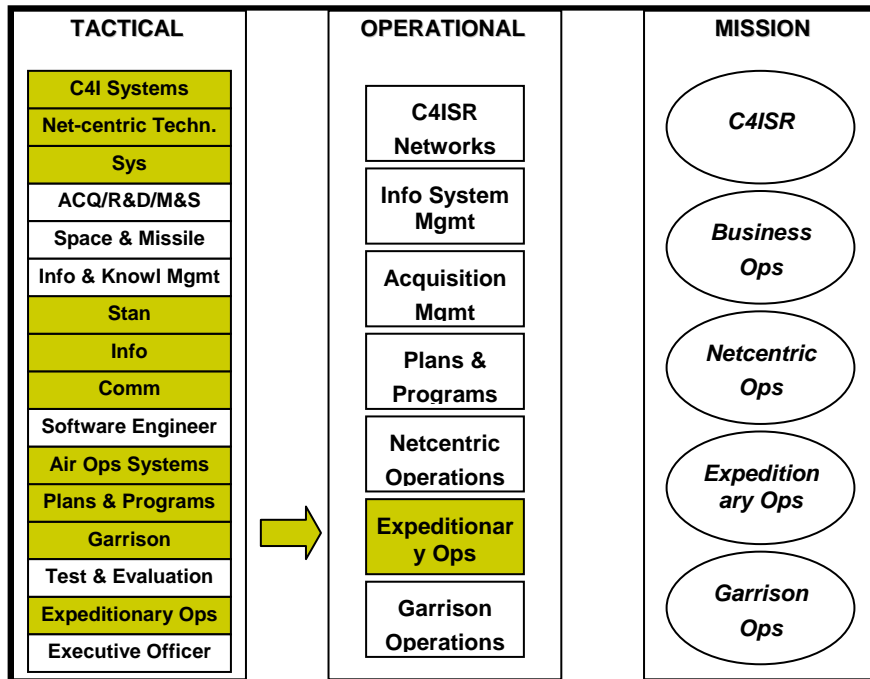


Diagram 6: Tactical Competencies mapped to Netcentric Operations



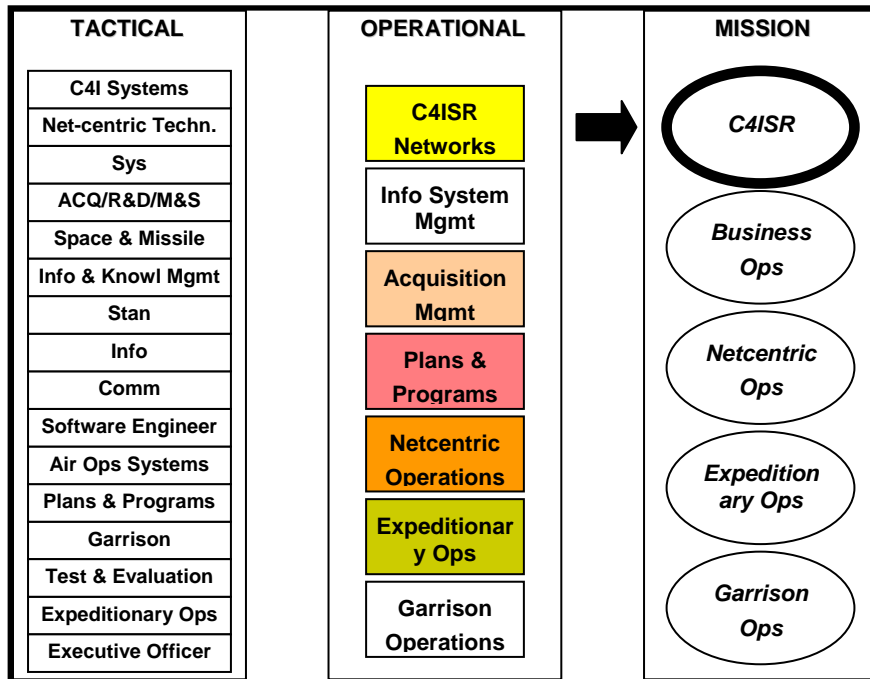


Diagram 9: Operational Competencies mapped to the C4ISR Capability

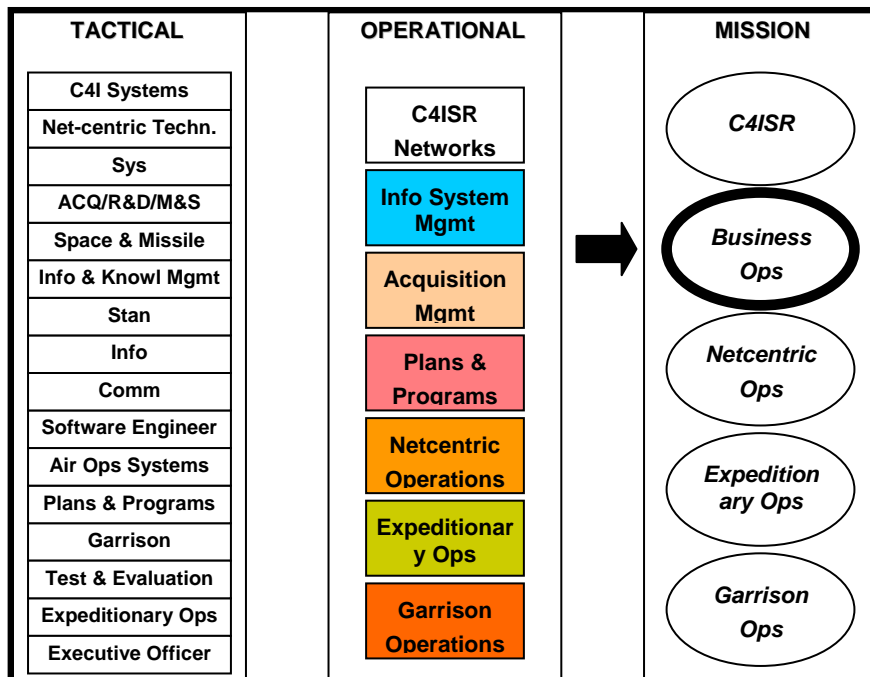


Diagram 10: Operational Competencies mapped to the Business Operations Capability

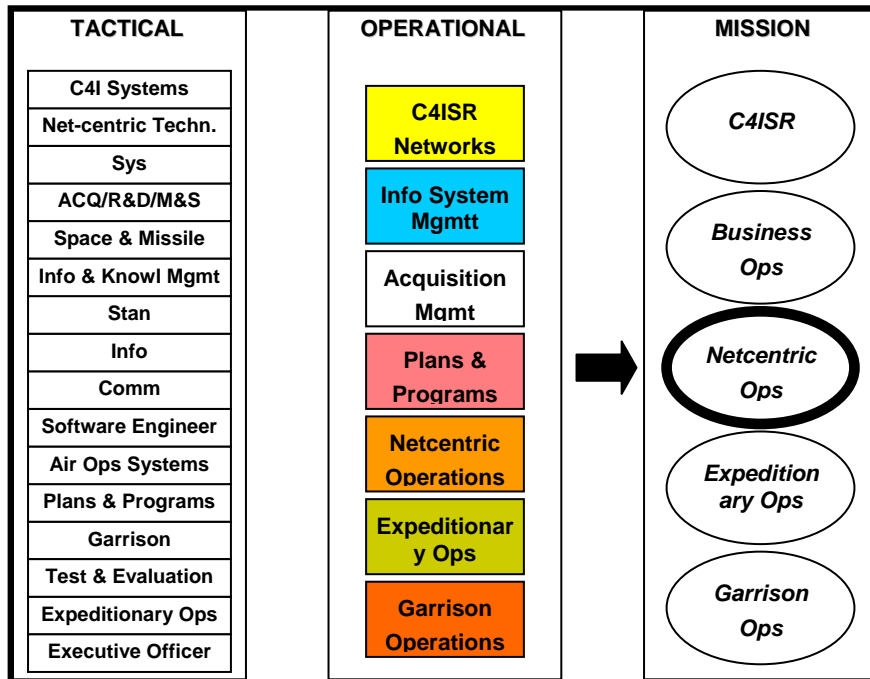


Diagram 11: Operational Competencies mapped to the Netcentric Operations Capability

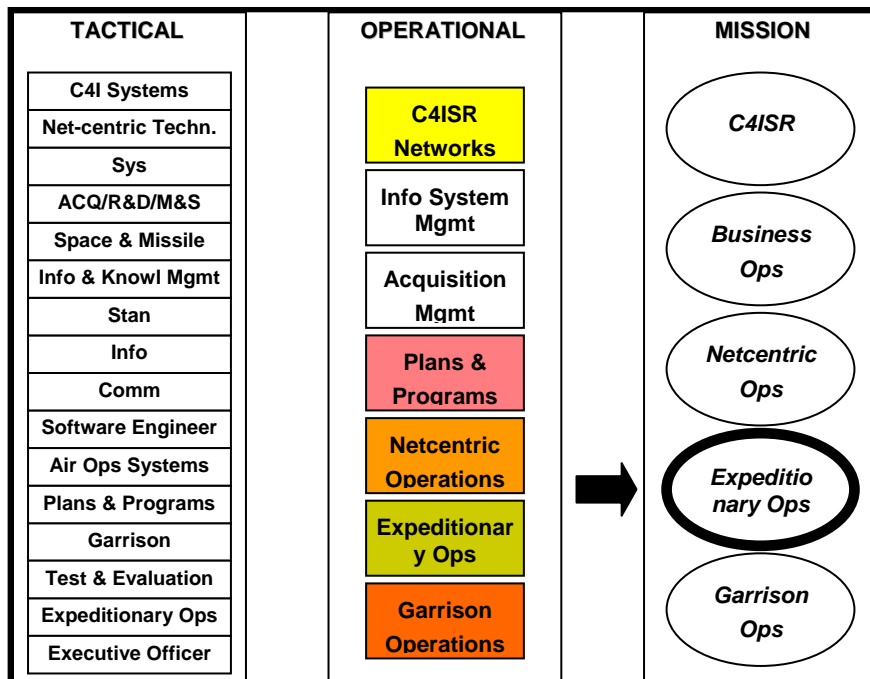


Diagram 12: Operational Competencies mapped to the Expeditionary Operations Capability

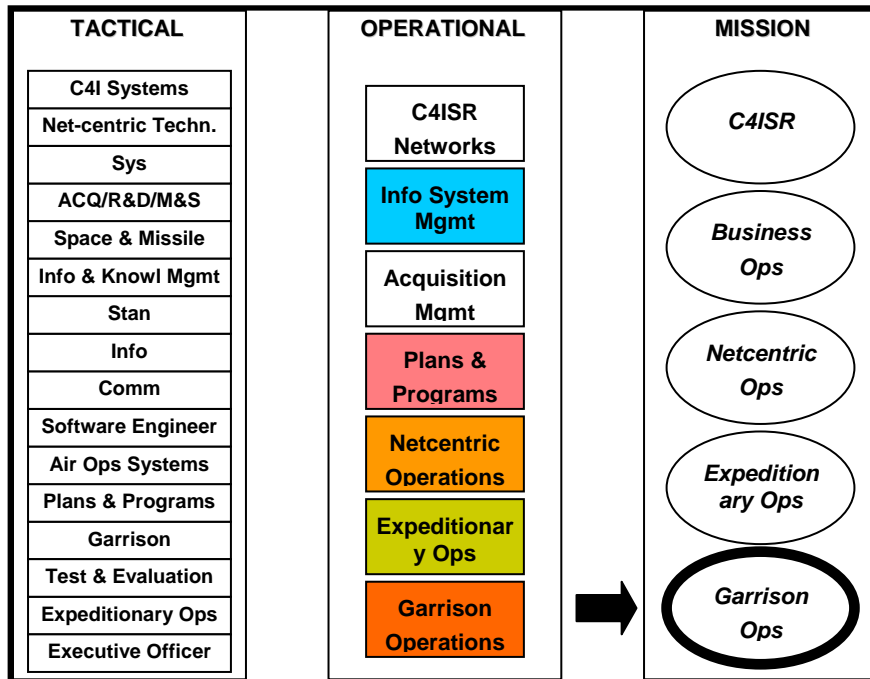


Diagram 13: Operational Competencies mapped to the Garrison Operations Capability

Bibliography

1. Air Force Personnel Center, *AFPC Development Team Member Handbook*, pg 1.
2. Air Force Personnel Center, *Air Force Officer Force Development Briefing*, slide 2.
3. Department of the Air Force, *AFDD 1-1: Leadership and Force Development*. (Washington: Department of the Air Force, 18 February 2006), pg 13.
4. TSgt David A. Jablonski, “AF Unveils Force Development Plan”, Air Force Print News; <http://www.af.mil>. 10 October 2003.
5. United States Government Accounting Office, *GAO-02-373SP: A Model of Strategic Human Capital Management*, March 2002, pg 4.
6. United States Government Accounting Office, *GAO-04-697: Defense Space Activities – Additional Actions Needed to Implement Human Capital Strategy and Develop Space Personnel*, August 2004, pg 6.
7. Ibid., pg 6.
8. United States Government Accounting Office, *GAO-05-629T: Defense Management – Key Elements Needed to Successfully Transform DOD Business Operations*, April 2005, pg 8.
9. Lieutenant General Roger Brady, Deputy Chief of Staff, Manpower & Personnel, *Building the 21st Century Air Force Briefing*, slide 4.
10. RAND, *Integrated planning for the Air Force Senior Leader Workforce*, 2004, pg xi.
11. Department of the Air Force, *AFDD 1-1: Leadership and Force Development*. (Washington: Department of the Air Force, 18 February 2006), pg 13.
12. Ibid., pg iii.
13. Department of the Air Force, *The U.S. Air Force Transformation Flight Plan*, (Washington: Department of the Air Force, November 2003), pg 33.
14. Ibid., pg 33.
15. Ibid., pg 36.

16. United States Government Accounting Office, *GAO-05-70: Military Transformation – Clear Leadership, Accountability, and Management Tools are Needed to Enhance DOD’s Efforts to Transform Military Capabilities*, December 2004, pg 1.
17. Department of Defense, *Program Budget Decision 720: Air Force Transformation Flight Plan*, (Washington: Department of the Air Force, 28 December 2005), pg 1.
18. Ibid., pg 3.
19. United States Government Accounting Office, *GAO-04-39: Human Capital – Key Principles for Effective Strategic Workforce Planning*, December 2003, pg 6.
20. RAND, *Understrength Air Force Officer Career Fields – A Management Approach*, 2005, pg xiii.
21. TSgt David A. Jablonski, “AF Unveils Force Development Plan”, Air Force Print News; <http://www.af.mil>. 10 October 2003.
22. Ibid.
23. Air Force Personnel Center, *AFPC Development Team Member Handbook*, pg 1.
24. Justin Menkes, *Executive Intelligence*, (New York: Harper Collins, 2005), pg 57.
25. Air Force Personnel Center, *Air Force Officer Force Development Briefing*, slide 4.
26. Department of the Air Force, *AFDD 1-1: Leadership and Force Development*. (Washington: Department of the Air Force, 18 February 2006), pg 26.
27. Department of the Air Force, *The U.S. Air Force Transformation Flight Plan*, (Washington: Department of the Air Force, November 2003), pg 36.
28. Air Force Personnel Center, *Force Development 101 Briefing*, slide 47.
29. Naval Professional Development Command, Center for Leadership Development, *Developing 21st Century Naval Leaders*, 11 April 2006, slide 12.
30. Air Force Personnel Center, *Force Development 101 Briefing*, slide 15.
31. United States Government Accounting Office, *GAO-05-833: Defense Space Activities – Management Guidance and Performance Measures Needed to Develop Personnel*, September 2005, pg 17.
32. Ibid., pg 2.

33. Rob C. Thomas II, "Managing Change through Workforce Transformation," *Intercom Magazine*, July 2004, pg 4.
34. Ibid., pg 4.
35. United States Government Accounting Office, *GAO-04-39: Human Capital – Key Principles for Effective Strategic Workforce Planning*, December 2003, front page.
36. United States Government Accounting Office, *GAO-04-39: Human Capital – Key Principles for Effective Strategic Workforce Planning*, December 2003, front page.
37. Department of the Air Force, *AFDD 1-1: Leadership and Force Development*. (Washington: Department of the Air Force, 18 February 2006), pg iii.
38. Vice Admiral Evan Chanik and Ryan Henry, "News Briefing with Ryan Henry and Vice Admiral Evan Chanik," <http://www.defenselink.com>, 3 February 2006.
39. Richard M. Vosburgh, "The One Thing You Need to Know About Great Managing, Great Leading, and Sustained Individual Success," *Human Resource Planning*, 2005, 28, 2, pg 31.
40. Department of the Army, Field Manual 22-100, *Army Leadership – Be, Know, Do*, (Washington: Department of the Army, August 1999), pg 7-1.
41. Lieutenant Colonel Edwin Burkhart, SAF/XCID, (Washington: Department of the Air Force, 3 January 2006), E-mail Q&A.
42. Air Force Personnel Center, *Communications-Information Officer Assignments Briefing*, slide 4.
43. Lieutenant General Leslie Kenne, "Air and Space Core Competencies – Bringing Decisive Effects to Joint Warfighting," *Intercom Magazine*, April 2003, pg 3.
44. Brian E. Becker and Mark A. Huselid, *The Workforce Scorecard*, (Boston: Harvard Business School Press, 2005), pg 45.
45. Gartner Consulting, *Communications and Information Workforce Transformation Briefing*, 9 August 2005, slide 7.
46. Ibid., slide 7.
47. Department of the Air Force, *AFDD 1-1: Leadership and Force Development*. (Washington: Department of the Air Force, 18 February 2006), pg 13.

48. United States Government Accounting Office, *GAO-02-373SP: A Model of Strategic Human Capital Management*, March 2002, pg 5.
49. Terrence E. Deal and Lee G. Bolman, *Reframing Organizations*, (San Francisco: Jossey-Bass Publishers, 1997), pg 122.
50. Tom Davenport, "If the Shoe Fits," *CIO – Australia's Magazine for Information Executives*, <http://www.cio.com.au>, 10 April 1997.
51. Department of the Air Force, *AFDD 1-1: Leadership and Force Development*. (Washington: Department of the Air Force, 18 February 2006), pg 22.
52. Department of Defense, "Quadrennial Defense Review Report," (Washington: Department of Defense, 6 February 2006), <http://www.defenselink.com>, pg 75.
53. Mike Losey, Sue Meisinger, and Dave Ulrich, *The Future of Human Resource Management*, (Hoboken, NJ: John Wiley & Sons, Inc, 2005), pg 200.
54. Ibid., pg 202.
55. Kurt Fischer, "Transforming HR Globally: The Center of Excellence Approach," *Human Resource Planning*, 2003, 26, 2, pg 10.
56. Air Force Personnel Center, *Communications-Information Officer Assignments Briefing*, slide 5.
57. Rusty Rueff and Hank Stringer, *Talent Force – A New Manifesto for the Human Side of Business*, (Upper Saddle River, NJ: Prentice Hall, 2006), pg 42.
58. United States Government Accounting Office, *GAO-04-39: Human Capital – Key Principles for Effective Strategic Workforce Planning*, December 2003, pg 1.
59. RAND, *Understrength Air Force Officer Career Fields – A Management Approach*, 2005, pg 60.
60. Brian E. Becker and Mark A. Huselid, *The Workforce Scorecard*, (Boston: Harvard Business School Press, 2005), pg 59.
61. GS-12 Jose Caussade, AFOMS, (San Antonio: Air Force Occupational Management Squadron, 9 March 2006), E-mail Q&A.

62. United States Government Accounting Office, *GAO-05-833: Defense Space Activities – Management Guidance and Performance Measures Needed to Develop Personnel*, September 2005, pg 13.
63. Hyperion Workforce Analysis, “Human Resources – Human Capital Measurement and Reporting,” <http://www.hyperion.com/solutions/lob/hr>.
64. Intralearn Software, “Intralearn and Skillview: Skills Management,” <http://www.intralearn.com>, pg 1.
65. Air Force Personnel Center, *AFPC Development Team Member Handbook*, pg 1.
66. Air Force Personnel Center, *Communications-Information Officer Assignments Briefing*, slide 14.
67. Department of the Air Force, *AFDD 1-1: Leadership and Force Development*. (Washington: Department of the Air Force, 18 February 2006), pg 13.
68. Amir Hartman, *Ruthless Execution*, (Upper Saddle, NJ: Prentice Hall, 2004), pg 22.
69. RAND, *Understrength Air Force Officer Career Fields – A Management Approach*, 2005, pg 63.
70. Jack Welch, *Winning*, (New York: Harper Collins, 2005), pg 101.
71. David Ulrich, *Human Resource Champions*, (Boston: Harvard Business School Press, 1997), pg 125.
72. Major Ken Bratland, AFPC, (San Antonio: Air Force Personnel Center, 24 January 2006), E-mail Q&A.
73. Kathleen Kelley Reardon, *It’s All Politics*, (New York: Random House, 2005), pg 35.
74. Major Ken Bratland, AFPC, (San Antonio: Air Force Personnel Center, 17 March 2006), E-mail Q&A.
75. Ibid.
76. Air Force Personnel Center, *Force Development 101 Briefing*, slide 17.
77. RAND, *Understrength Air Force Officer Career Fields – A Management Approach*, 2005, pg xv.

78. Major Ken Bratland, AFPC, (San Antonio: Air Force Personnel Center, 24 January 2006), E-mail Q&A.
79. Rusty Rueff and Hank Stringer, *Talent Force – A New Manifesto for the Human Side of Business*, (Upper Saddle River, NJ: Prentice Hall, 2006), pg 5.
80. Major Debra Jackson, AFPC, (San Antonio: Air Force Personnel Center, 16 December 2005), E-mail Q&A.
81. Mike Losey, Sue Meisinger, and Dave Ulrich, *The Future of Human Resource Management*, (Hoboken, NJ: John Wiley & Sons, Inc., 2005), pg 84.
82. RAND, *Understrength Air Force Officer Career Fields – A Management Approach*, 2005, pg 57.
83. Richard M. Vosburgh, “The One Thing You Need to Know About Great Managing, Great Leading, and Sustained Individual Success,” *Human Resource Planning*, 2005, 28, 2, pg 29.
84. Mike Losey, Sue Meisinger, and Dave Ulrich, *The Future of Human Resource Management*, (Hoboken, NJ: John Wiley & Sons, Inc., 2005), pg 84.
85. Air Force Personnel Center, *Communications-Information Officer Assignments Briefing*, slide 12.
86. Major Ken Bratland, AFPC, (San Antonio: Air Force Personnel Center, 17 March 2006), E-mail Q&A.
87. Air Force Personnel Center, *Communications-Information Officer Assignments Briefing*, slide 22.
88. RAND, *Understrength Air Force Officer Career Fields – A Management Approach*, 2005, pg 42.
89. James W. Walker and James M. LaRocca, “Talent Pools: The Best and the Rest,” *Human Resource Planning*, 2002, 25, pg 12.
90. David Ulrich, *Human Resource Champions*, (Boston: Harvard Business School Press, 1997), pg 144.
91. Air Force Personnel Center, *Communications-Information Officer Assignments Briefing*, slide 18.
92. Air Force Personnel Center, *Force Development 101 Briefing*, slide 73.

93. Ibid., pg 62.
94. Mark Huselid, "Bring Out the Best in Your Employees with Workforce Scorecards," *Veritude: Strategic Human Resources*, <http://www.veritude.com>.
95. John W. Boudreau, Edward E. Lawler, and Alec R. Levenson, "HR Metrics and Analytics: Use and Impact," *Human Resource Planning*, 2004, 4, pg 27.
96. Major Ken Bratland, AFPC, (San Antonio: Air Force Personnel Center, 24 January 2006), E-mail Q&A.
97. Air Force Personnel Center, *Communications-Information Officer Assignments Briefing*, slide 20.
98. Department of the Air Force, *AFDD 1-1: Leadership and Force Development*. (Washington: Department of the Air Force, 18 February 2006), pg 26.
99. Major Ken Bratland, AFPC, (San Antonio: Air Force Personnel Center, 17 March 2006), E-mail Q&A.
100. Mike Losey, Sue Meisinger, and Dave Ulrich, *The Future of Human Resource Management*, (Hoboken, NJ: John Wiley & Sons, Inc., 2005), pg 128.
101. Sunil J. Ramlall, "Measuring Human Resource Management's Effectiveness in Improving Performance," *Human Resource Planning*, 2003, 26, pg 57.
102. William J. Rothwell, *Beyond Training and Development*, (New York: American Management Association, 1996), pg 5.
103. GS-13 Lisa McCoy, AFCA, (Scott AFB, IL: Air Force Communications Agency, 27 February 2006), E-mail Q&A.
104. Department of the Air Force, *Air Force Instruction 36-2623, Occupational Analysis Compliance*, (Washington: Department of the Air Force, 1 May 1998), pg 8.
105. Department of the Air Force, *Draft AFSC 33S Communications and Information Officer Career Field Education and Training Plan*, as of February 2006, pg 23.
106. Ibid., pg 32.
107. GS-13 Lisa McCoy, AFCA, (Scott AFB, IL: Air Force Communications Agency, 27 February 2006), E-mail Q&A.

108. Colonel David J. Kovach, “Announcement of Officer Tech Refresh (OTR) Program,” *E-mail Correspondence*, (Scott AFB, IL: Air Force Communications Agency, 13 November 2002).
109. Ms. Faith Hale, AFCA, (Scott AFB, IL: Air Force Communications Agency, 26 January 2006), E-mail Q&A.
110. HQ ACC/A6XR Plans and Requirements Division, “ACC People First Strategic Plan Objectives – ACC/A6 Training Transformation Strategy,” (Langley AFB, VA), ACC/A6 Website.
111. Captain Wade Dillard, AIA, (Air Intelligence Agency, 24 February 2006), E-mail Q&A.
112. Gary Hamel and C.K. Prahalad, *Competing for the Future*, (Boston: Harvard Business School Press, 1994), pg 142.
113. David Ulrich, *Human Resource Champions*, (Boston: Harvard Business School Press, 1997), pg 16.
114. Air Force Personnel Center, *Communications-Information Officer Assignments Briefing*, slide 3.
115. Gary Hamel and C.K. Prahalad, *Competing for the Future*, (Boston: Harvard Business School Press, 1994), pg 146.
116. Ralph Christensen, *Roadmap to Strategic HR*, (New York: American Management Association, 2006), pg 47.
117. Gary Hamel and C.K. Prahalad, *Competing for the Future*, (Boston: Harvard Business School Press, 1994), pg 15.
118. Ralph Christensen, *Roadmap to Strategic HR*, (New York: American Management Association, 2006), pg 120.
119. Michael Dell, *Direct from Dell – Strategies that Revolutionized an Industry*, (New York: Harper Collins, 1999), pg 128.
120. John P. Kotter, *The Heart of Change*, (Boston: Harvard Business School Press, 2002), pg 3.
121. Michael Robert, *The New Strategic Thinking – Pure & Simple*, (New York: McGraw-Hill, 2006), pg 21.

122. Wayne Brockbank and David Ulrich, *HR – The Value Proposition*, (Boston: Harvard Business School Press, 2005), pg 150.
123. John W. Boudreau and Peter M. Ramstad, “Talent and the New Paradigm for Human Resource Management: From Professional Practices to Strategic Talent Decision Science,” *Human Resource Planning*, 2005, 28, 2, pg 20.
124. David Ulrich, *Human Resource Champions*, (Boston: Harvard Business School Press, 1997), pg 27.
125. John W. Boudreau and Peter M. Ramstad, “Talent and the New Paradigm for Human Resource Management: From Professional Practices to Strategic Talent Decision Science,” *Human Resource Planning*, 2005, 28, 2, pg 19.
126. Gary Hamel and C.K. Prahalad, *Competing for the Future*, (Boston: Harvard Business School Press, 1994), pg 6.
127. John W. Boudreau, Edward E. Lawler, and Alec R. Levenson, “HR Metrics and Analytics: Use and Impact,” *Human Resource Planning*, 2004, 4, pg 28.
128. Elizabeth F. Cabrera, “Strategic Human Resource Evaluation,” *Human Resource Planning*, 2003, 26, 1, pg 42.
129. Brian E. Becker and Mark A. Huselid, *The Workforce Scorecard*, (Boston: Harvard Business School Press, 2005), pg 13.
130. Headquarters Air Combat Command, *AFNetOps Transformation Briefing*, 28 March 2006, slide 4.
131. Mark Huselid, “Bring out the Best in Your Employees with Workforce Scorecards,” *Veritude: Strategic Human Resources*, <http://www.veritude.com>.
132. David Ulrich, *Human Resource Champions*, (Boston: Harvard Business School Press, 1997), pg 25.
133. Jim Kochanski and Peter LeBlanc, “Does Your Business Need a People Strategy,” <http://www.workinfo.com>, pg 3.
134. Mark Huselid, “Bring Out the Best in Your Employees with Workforce Scorecards,” *Veritude: Strategic Human Resources*, <http://www.veritude.com>.
135. RAND, *Alternate Futures and Army Force Planning Implications for the Future Force Era*, 2005, pg 1.

136. Ralph Christensen, *Roadmap to Strategic HR*, (New York: American Management Association, 2006), pg 52.
137. Ibid., pg 52.
138. Ibid., pg 120.
139. Vice Admirals Alfred G. Harms, Gerald L. Hoewing, and John B. Totushek, "Sea Warrior: Maximizing Human Capital," *Proceeding Magazine*, June 2003.
140. Michael Dell, *Direct from Dell – Strategies that Revolutionized an Industry*, (New York: Harper Collins, 1999), pg 126.
141. Bernasia Halikowa, Mark Hoyal, and Paul Osgood, "Do Human Resources Really Add Value to a Business," *Management Quarterly*, May 2003.
142. Matthew C. Brush and Donald H. Ruse, "Driving Strategic Success through Human Capital Planning," *Human Resource Planning*, 2005, 28, 1, pg 50.
143. Thomas C. Bechet, "Developing Staffing Strategies that Work: Implementing Pragmatic, Nontraditional Approaches," <http://www.thewalkergroup.com>, pg 11.
144. Dana and Jim Robinson, *Zap the Gaps*, (New York: Harper Collins, 2002), pg xiii.
145. United States Government Accounting Office, *GAO-02-373SP: A Model of Strategic Human Capital Management*, March 2002, pg 8.
146. Matthew C. Brush and Donald H. Ruse, "Driving Strategic Success through Human Capital Planning," *Human Resource Planning*, 2005, 28, 1, pg 49.
147. John W. Boudreau and Peter M. Ramstad, "Talent and the New Paradigm for Human Resource Management: From Professional Practices to Strategic Talent Decision Science," *Human Resource Planning*, 2005, 28, 2, pg 19.
148. Michael Dell, *Direct from Dell – Strategies that Revolutionized an Industry*, (New York: Harper Collins, 1999), pg 207.
149. Thomas C. Bechet, "Developing Staffing Strategies that Work: Implementing Pragmatic, Nontraditional Approaches," <http://www.thewalkergroup.com>, pg 1.
150. Ralph Christensen, *Roadmap to Strategic HR*, (New York: American Management Association, 2006), pg 53.

151. Elena Malykhina, "Supplying Labor to Meet Demand," *Information Week*, 21 March 2005, pg 2.
152. James W. Walker and James M. LaRocca, "Talent Pools: The Best and the Rest," *Human Resource Planning*, 2002, 25, pg 13.
153. John W. Boudreau and Peter M. Ramstad, "Talent and the New Paradigm for Human Resource Management: From Professional Practices to Strategic Talent Decision Science," *Human Resource Planning*, 2005, 28, 2, pg 21.
154. Mike Losey, Sue Meisinger, and Dave Ulrich, *The Future of Human Resource Management*, (Hoboken, NJ: John Wiley & Sons, Inc, 2005), pgs 189 – 191.
155. Vice Admirals Alfred G. Harms, Gerald L. Hoewing, and John B. Totushek, "Sea Warrior: Maximizing Human Capital," *Proceeding Magazine*, June 2003.
156. John W. Boudreau and Peter M. Ramstad, "Talent and the New Paradigm for Human Resource Management: From Professional Practices to Strategic Talent Decision Science," *Human Resource Planning*, 2005, 28, 2, pg 22.
157. Jamie Barber, "Nine Steps to Making the Most of Your HR Metrics," *Human Resources*, 17 May 2005.
158. Scott Leibs, "Building a Better Workplace," <http://www.cfo.com>, 15 September 2005.
159. Megan Santosus, "The Human-capital Factor," <http://www.cfo.com>, 15 September 2005.
160. John W. Boudreau, Edward E. Lawler, and Alec R. Levenson, "HR Metrics and Analytics: Use and Impact," *Human Resource Planning*, 2004, 4, pg 28.
161. Debra J. Cohen, "HR Metrics: A Must – Future Focus," *HR Magazine*, February 2003.
162. Jack Welch, *Winning*, (New York: Harper Collins, 2005), pg 182.
163. Michael Dell, *Direct from Dell – Strategies that Revolutionized an Industry*, (New York: Harper Collins, 1999), pg 108.
164. Ralph Christensen, *Roadmap to Strategic HR*, (New York: American Management Association, 2006), pg 172.

165. CellExchange – SkillsNet, “Navy’s 5-VM Case Study,” <http://www.cellexchange.com>.
166. Vice Admirals Alfred G. Harms, Gerald L. Hoewing, and John B. Totushek, “Sea Warrior: Maximizing Human Capital,” *Proceeding Magazine*, June 2003.
167. Michael Dell, *Direct from Dell – Strategies that Revolutionized an Industry*, (New York: Harper Collins, 1999), pg 113.
168. Vice Admiral J. Kevin Moran, “Sea Warrior – a True Revolution in Training,” High Beam Research, <http://www.highbeam.com>, 1 October 2005.
169. Richard P. Finnegan, Fredric D. Frank, and Craig R. Taylor, “The Race for Talent: Retaining and Engaging Workers in the 21st Century,” *Human Resource Planning*, 2004, 27, 3, pg 16.
170. Vice Admiral J. Kevin Moran, “Sea Warrior – a True Revolution in Training,” High Beam Research, <http://www.highbeam.com>, 1 October 2005.
171. RAND, *Air Force Procurement Workforce Transformation Lessons from the Commercial Sector*, 2004, pg 24.
172. Sunil J. Ramlall, “Measuring Human Resource Management’s Effectiveness in Improving Performance,” *Human Resource Planning*, 2003, 26, pg 57.
173. Ibid., pg 56.
174. David Ulrich, *Human Resource Champions*, (Boston: Harvard Business School Press, 1997), pg 226.
175. Wayne Brockbank and David Ulrich, *HR – The Value Proposition*, (Boston: Harvard Business School Press, 2005), pg 11.
176. Mike Losey, Sue Meisinger, and Dave Ulrich, *The Future of Human Resource Management*, (Hoboken, NJ: John Wiley & Sons, Inc, 2005), pg 120.
177. Jack Welch, *Winning*, (New York: Harper Collins, 2005), pg 99.
178. Mike Losey, Sue Meisinger, and Dave Ulrich, *The Future of Human Resource Management*, (Hoboken, NJ: John Wiley & Sons, Inc, 2005), pgs 67, 79 – 81.
179. Ibid., pg 69.

180. Wayne Brockbank and David Ulrich, *HR – The Value Proposition*, (Boston: Harvard Business School Press, 2005), pg 221.
181. Ibid., pg 199.
182. PriceWaterHouseCoopers – Human Resource Services, “Key Trends in Human Capital: A Global Perspective,” *Saratoga Executive Summary*, January 2005, pg 1.
183. Brian E. Becker and Mark A. Huselid, *The Workforce Scorecard*, (Boston: Harvard Business School Press, 2005), pg 14.
184. Ralph Christensen, *Roadmap to Strategic HR*, (New York: American Management Association, 2006), pg 49.
185. Ibid., pg 49.
186. Rusty Rueff and Hank Stringer, *Talent Force – A New Manifesto for the Human Side of Business*, (Upper Saddle River, NJ: Prentice Hall, 2006), pg 103.
187. Mike Losey, Sue Meisinger, and Dave Ulrich, *The Future of Human Resource Management*, (Hoboken, NJ: John Wiley & Sons, Inc, 2005), pgs 296.
188. Justin Menkes, *Executive Intelligence*, (New York: Harper Collins, 2005), pg 61.
189. The Army Research Institute for Behavioral and Social Sciences, *Army Tech Report 1148: Competency Based Future Leadership Requirements*, July 2004, pg 9.
190. Allan Schweyer, “Are You Managing Your Company’s Talent,” *Optimize Magazine*, <http://www.optimize-mag.com>, February 2004, Issue 22, pg 1.
191. Robert Slater, *Microsoft Rebooted*, (New York: Penguin Group, Inc., 2004), pg 183.
192. United States Government Accounting Office, *GAO-06-125: Force Structure – Assessments of Navy Reserves Manpower Requirements Need to Consider the Most Cost-effective Mix of Active and Reserve Manpower to Meet Mission Needs*, October 2005, pg 6.
193. Jim Kochanski and Peter LeBlanc, “Does Your Business Need a People Strategy,” <http://www.workinfo.com>, pg 1.
194. Gary Hamel and C.K. Prahalad, *Competing for the Future*, (Boston: Harvard Business School Press, 1994), pg 197.

195. Vice Admirals Alfred G. Harms, Gerald L. Hoewing, and John B. Totushek, "Sea Warrior: Maximizing Human Capital," *Proceeding Magazine*, June 2003.
196. David Essex, "Managing People Like a Supply Chain," *Chief Supply Chain Officer Magazine*, 5 December 2005, pg 3.
197. Jim Kochanski and Peter LeBlanc, "Does Your Business Need a People Strategy," <http://www.workinfo.com>, pg 2.
198. David Essex, "Managing People Like a Supply Chain," *Chief Supply Chain Officer Magazine*, 5 December 2005, pg 4.
199. Ralph Christensen, *Roadmap to Strategic HR*, (New York: American Management Association, 2006), pg 123.
200. United States Office of Personnel Management, "Five-step Workforce Planning Model", <http://www.opm.gov/workforceplanning/wfpmodel>.
201. Vice Admirals Alfred G. Harms, Gerald L. Hoewing, and John B. Totushek, "Sea Warrior: Maximizing Human Capital," *Proceeding Magazine*, June 2003.
202. Ibid.
203. The Army Research Institute for Behavioral and Social Sciences, *Army Tech Report 1148: Competency Based Future Leadership Requirements*, July 2004, pg 14.
204. Allan R. Cohen, *The Portable MBA in Management*, (New York: John Wiley & Sons, Inc, 2002), pg 281.
205. David Packard, *The HP Way*, (New York: Harper Collins, 1995), pgs 134 – 135.
206. Michael Dell, *Direct from Dell – Strategies that Revolutionized an Industry*, (New York: Harper Collins, 1999), pg 136.
207. Sunil J. Ramlall, "Measuring Human Resource Management's Effectiveness in Improving Performance," *Human Resource Planning*, 2003, 26, pg 54.
208. The Army Research Institute for Behavioral and Social Sciences, *Army Tech Report 1148: Competency Based Future Leadership Requirements*, July 2004, pg 15.
209. David Essex, "Managing People Like a Supply Chain," *Chief Supply Chain Officer Magazine*, 5 December 2005, pg 3.

210. Madan Birla, *FedEx Delivers*, (Hoboken, NJ: John Wiley & Sons, Inc, 2005), pg 114.
211. Vice Admiral J. Kevin Moran, “Sea Warrior – a True Revolution in Training,” High Beam Research, <http://www.highbeam.com>, 1 October 2005.
212. Elena Malykhina, “Supplying Labor to Meet Demand,” *Information Week*, 21 March 2005, pg 2.
213. Rusty Rueff and Hank Stringer, *Talent Force – A New Manifesto for the Human Side of Business*, (Upper Saddle River, NJ: Prentice Hall, 2006), pg 110.
214. Department of the Air Force, *AFDD 1-1: Leadership and Force Development*. (Washington: Department of the Air Force, 18 February 2006), pg vi.
215. Ibid., pg vi.
216. Department of the Air Force, *The U.S. Air Force Transformation Flight Plan*, (Washington: Department of the Air Force, November 2003), pg 34.
217. Ibid., pg 34.
218. TSgt David A. Jablonski, “AF Unveils Force Development Plan”, Air Force Print News; <http://www.af.mil>. 10 October 2003.
219. United States Government Accounting Office, *GAO-02-373SP: A Model of Strategic Human Capital Management*, March 2002, pg 1.
220. Department of the Air Force, *FY2007 Air Force Posture Statement*, (Washington: Department of the Air Force, 2 March 2006), pg 7.
221. Department of Defense, “Quadrennial Defense Review Report,” (Washington: Department of Defense, 6 February 2006), <http://www.defenselink.com>, pg 4.
222. Rusty Rueff and Hank Stringer, *Talent Force – A New Manifesto for the Human Side of Business*, (Upper Saddle River, NJ: Prentice Hall, 2006), pg 1.
223. Headquarters Air Combat Command, *AFNetOps Transformation Briefing*, 28 March 2006, slide 4.
224. Gary Hamel and C.K. Prahalad, *Competing for the Future*, (Boston: Harvard Business School Press, 1994), pg 70.

225. United States Government Accounting Office, *GAO-02-373SP: A Model of Strategic Human Capital Management*, March 2002, pg 4.
226. Brian E. Becker and Mark A. Huselid, *The Workforce Scorecard*, (Boston: Harvard Business School Press, 2005), pg 25.
227. Secretary of the Air Force Office of Warfighting Integration and Chief Information Officer, *FY2006 Strategic Plan*, (Washington: Department of the Air Force, 15 November 2005), pg 2.
228. Rob C. Thomas, “Managing Change through Workforce Transformation,” *Intercom Magazine*, July 2004, pg 4.
229. United States Government Accounting Office, *GAO-02-373SP: A Model of Strategic Human Capital Management*, March 2002, pg 14.
230. Department of the Air Force, *AFDD 1-1: Leadership and Force Development*. (Washington: Department of the Air Force, 18 February 2006), pg 14.
231. Department of the Army, Field Manual 22-100, *Army Leadership – Be, Know, Do*, (Washington: Department of the Army, August 1999), pg 2-21.
232. United States Government Accounting Office, *GAO-04-39: Human Capital – Key Principles for Effective Strategic Workforce Planning*, December 2003, pg 24.
233. Rob C. Thomas, “Managing Change through Workforce Transformation,” *Intercom Magazine*, July 2004, pg 4.
234. Myra Liwanag and Joe Wert, “HR as Strategic Partner,” *Sibson*, <http://www.imakenews.com/sibson>, 24 June 2002.
235. David J. Collis, *Strategy – Create and Implement the Best Strategy for Your Business*, (Boston: Harvard Business School Press, 2005), pg 110.
236. RAND, *Understrength Air Force Officer Career Fields – A Management Approach*, 2005, pg 53.
237. Edward E. Lawler III, *From Administrators to Strategists: Transforming HR Professionals Briefing*, Center for Effective Organizations, Marshall School of Business, University of Southern California, 18 October 2004, slide 2.
238. United States Government Accounting Office, *GAO-04-39: Human Capital – Key Principles for Effective Strategic Workforce Planning*, December 2003, front page.

239. RAND, *Understrength Air Force Officer Career Fields – A Management Approach*, 2005, pg 8.
240. United States Government Accounting Office, *GAO-05-833: Defense Space Activities – Management Guidance and Performance Measures Needed to Develop Personnel*, September 2005, pg 9.
241. RAND, *Understrength Air Force Officer Career Fields – A Management Approach*, 2005, pg 66.
242. Erwin Janush, “Aligning HR Strategy with Business Strategy,” *OI Partners Inc.*, <http://www.oipartners.net>, 1 September 2005.
243. Matthew C. Brush and Donald H. Ruse, “Driving Strategic Success through Human Capital Planning,” *Human Resource Planning*, 2005, 28, 1, pg 59.
244. David J. Collis, *Strategy – Create and Implement the Best Strategy for Your Business*, (Boston: Harvard Business School Press, 2005), pg 114.
245. Department of the Air Force, *AFDD 1-1: Leadership and Force Development*. (Washington: Department of the Air Force, 18 February 2006), pg 19.
246. United States Government Accounting Office, *GAO-04-697: Defense Space Activities – Additional Actions Needed to Implement Human Capital Strategy and Develop Space Personnel*, August 2004, pg 12.
247. RAND, *Understrength Air Force Officer Career Fields – A Management Approach*, 2005, pg xvii.
248. Mike Losey, Sue Meisinger, and Dave Ulrich, *The Future of Human Resource Management*, (Hoboken, NJ: John Wiley & Sons, Inc, 2005), pg 89.
249. Matthew C. Brush and Donald H. Ruse, “Driving Strategic Success through Human Capital Planning,” *Human Resource Planning*, 2005, 28, 1, pg 59.
250. United States Government Accounting Office, *GAO-02-373SP: A Model of Strategic Human Capital Management*, March 2002, pg 15.
251. Erwin Janush, “Aligning HR Strategy with Business Strategy,” *OI Partners Inc.*, <http://www.oipartners.net>, 1 September 2005.
252. Jack Welch, *Winning*, (New York: Harper Collins, 2005), pg 98.

253. RAND, *Understrength Air Force Officer Career Fields – A Management Approach*, 2005, pg 68.
254. Sunil J. Ramlall, “Measuring Human Resource Management’s Effectiveness in Improving Performance,” *Human Resource Planning*, 2003, 26, pg 52.
255. RAND, *Understrength Air Force Officer Career Fields – A Management Approach*, 2005, pg xvi.
256. David Ulrich, *Human Resource Champions*, (Boston: Harvard Business School Press, 1997), pg 27.
257. Wayne Brockbank and David Ulrich, *HR – The Value Proposition*, (Boston: Harvard Business School Press, 2005), pg 44.
258. United States Government Accounting Office, *GAO-04-39: Human Capital – Key Principles for Effective Strategic Workforce Planning*, December 2003, pg 3.
259. John Stafford, “Air Force Forms New Information Technology Organization,” *Intercom Magazine*, February 2005, pg 4.
260. Rusty Rueff and Hank Stringer, *Talent Force – A New Manifesto for the Human Side of Business*, (Upper Saddle River, NJ: Prentice Hall, 2006), pg 45.
261. United States Government Accounting Office, *GAO-02-373SP: A Model of Strategic Human Capital Management*, March 2002, pg 17.
262. Ibid., pg 17.
263. RAND, *Framing a Strategic Approach for Joint Officer Management*, 2005, pg xix.
264. Thomas P. Bechet, *Strategic Staffing Guidebook*, <http://www.hrbiz.com>, pg 1.
265. Mike Losey, Sue Meisinger, and Dave Ulrich, *The Future of Human Resource Management*, (Hoboken, NJ: John Wiley & Sons, Inc, 2005), pg 156.
266. Department of the Air Force, *AFDD 1-1: Leadership and Force Development*. (Washington: Department of the Air Force, 18 February 2006), pg 13.
267. RAND, *Framing a Strategic Approach for Joint Officer Management*, 2005, pg 90.
268. Mike Losey, Sue Meisinger, and Dave Ulrich, *The Future of Human Resource Management*, (Hoboken, NJ: John Wiley & Sons, Inc, 2005), pg xx.

269. United States Government Accounting Office, *GAO-04-39: Human Capital – Key Principles for Effective Strategic Workforce Planning*, December 2003, pg 10.
270. Ralph Christensen, *Roadmap to Strategic HR*, (New York: American Management Association, 2006), pg 125.
271. United States Government Accounting Office, *GAO-04-39: Human Capital – Key Principles for Effective Strategic Workforce Planning*, December 2003, pg 12.
272. Brian E. Becker and Mark A. Huselid, *The Workforce Scorecard*, (Boston: Harvard Business School Press, 2005), pg 204.
273. Ibid.
274. Air Force Personnel Center, *Air Force Officer Force Development Briefing*, slides 6 – 8.
275. Department of the Air Force, *AFDD 1-1: Leadership and Force Development*. (Washington: Department of the Air Force, 18 February 2006), pg 30.
276. Air Force Personnel Center, *Air Force Officer Force Development Briefing*, slides 6 – 8.
277. Department of the Air Force, *AFDD 1-1: Leadership and Force Development*. (Washington: Department of the Air Force, 18 February 2006), pg 32.
278. Ibid., pg 34.
279. Department of the Army, Field Manual 22-100, *Army Leadership – Be, Know, Do*, (Washington: Department of the Army, August 1999), pg 7-2.
280. RAND, *Framing a Strategic Approach for Joint Officer Management*, 2005, pg xvi.
281. Brian E. Becker and Mark A. Huselid, *The Workforce Scorecard*, (Boston: Harvard Business School Press, 2005), pg 127.
282. Department of Defense, “Quadrennial Defense Review Report,” (Washington: Department of Defense, 6 February 2006), <http://www.defenselink.com>, pg 75.
283. Sunil J. Ramlall, “Measuring Human Resource Management’s Effectiveness in Improving Performance,” *Human Resource Planning*, 2003, 26, pg 55.
284. Thomas P. Bechet, *Strategic Staffing Guidebook*, <http://www.hrbiz.com>, pg 2.

285. Brian E. Becker and Mark A. Huselid, *The Workforce Scorecard*, (Boston: Harvard Business School Press, 2005), pg 11.
286. Cliff Grimes, "Planning Individual Employee Training and Development," <http://www.accel-team.com>, pg 3.
287. United States Government Accounting Office, *GAO-02-373SP: A Model of Strategic Human Capital Management*, March 2002, pg 20.
288. Jim Kochanski and Peter LeBlanc, "Does Your Business Need a People Strategy," <http://www.workinfo.com>, pg 4.
289. Matthew C. Brush and Donald H. Ruse, "Driving Strategic Success through Human Capital Planning," *Human Resource Planning*, 2005, 28, 1, pg 50.
290. Thomas C. Bechet, "Developing Staffing Strategies that Work: Implementing Pragmatic, Nontraditional Approaches," <http://www.thewalkergroup.com>, pg 3.
291. Marc Effron, Shelli Greenslade, and Michelle Salob, "Growing Great Leaders: Does it Really Matter," *Human Resource Planning*, 2005, 28, 3, pg 21.
292. Ibid., pg 21.
293. Ibid., pg 20.
294. Air Force Personnel Center, "Skill Pairings Helps Development Teams Vector Airmen," *Air Force Personnel Center Public Affairs*, 12 December 2005.
295. United States Government Accounting Office, *GAO-05-833: Defense Space Activities – Management Guidance and Performance Measures Needed to Develop Personnel*, September 2005, pg 20.
296. RAND, *Integrated planning for the Air Force Senior Leader Workforce*, 2004, pg 7.
297. Ibid., pg 7.
298. Ibid., pg 41.
299. Donald Ruse, "People Portfolio Management," <http://www.imakenews.com>, 12 March 2002.
300. Department of Defense, "Quadrennial Defense Review Report," (Washington: Department of Defense, 6 February 2006), <http://www.defenselink.com>, pg 5.

301. David J. Collis, *Strategy – Create and Implement the Best Strategy for Your Business*, (Boston: Harvard Business School Press, 2005), pg 66.
302. Gartner Consulting, *Communications and Information Workforce Transformation Briefing*, 9 August 2005, slide 63.
303. David Ulrich, *Human Resource Champions*, (Boston: Harvard Business School Press, 1997), pg 148.
304. Brian E. Becker and Mark A. Huselid, *The Workforce Scorecard*, (Boston: Harvard Business School Press, 2005), pg 204.
305. James W. Walker and James M. LaRocca, “Talent Pools: The Best and the Rest,” *Human Resource Planning*, 2002, 25, pg 13.
306. Jack Welch, *Winning*, (New York: Harper Collins, 2005), pg 44.
307. David Ulrich, *Human Resource Champions*, (Boston: Harvard Business School Press, 1997), pg 60.
308. John W. Boudreau and Peter M. Ramstad, “Talent and the New Paradigm for Human Resource Management: From Professional Practices to Strategic Talent Decision Science,” *Human Resource Planning*, 2005, 28, 2, pg 24.
309. Elena Malykhina, “Supplying Labor to Meet Demand,” *Information Week*, 21 March 2005, pg 3.
310. Thomas H. Davenport and Laurence Prusak, *Working Knowledge – How Organizations Manage What They Know*, (Boston: Harvard Business School Press, 2000), pg 18.
311. Madan Birla, *FedEx Delivers*, (Hoboken, NJ: John Wiley & Sons, Inc, 2005), pg 114.
312. Lieutenant Colonel Randy Coats, “Training Toolbox,” *Intercom Magazine*, December 2005, pg 7.
313. David J. Collis, *Strategy – Create and Implement the Best Strategy for Your Business*, (Boston: Harvard Business School Press, 2005), pg 114.
314. Department of the Air Force, *AFDD 1-1: Leadership and Force Development*. (Washington: Department of the Air Force, 18 February 2006), pg 28.

315. Ibid., pg 28.
316. Brian E. Becker and Mark A. Huselid, *The Workforce Scorecard*, (Boston: Harvard Business School Press, 2005), pg x.
317. United States Government Accounting Office, *GAO-04-873: DOD Needs to Develop Performance Goals and Metrics for Advanced Distributed Learning in Professional Military Education*, July 2004, pg 8.
318. Department of the Air Force, *AFDD 1-1: Leadership and Force Development*. (Washington: Department of the Air Force, 18 February 2006), pg 21.
319. Rusty Rueff and Hank Stringer, *Talent Force – A New Manifesto for the Human Side of Business*, (Upper Saddle River, NJ: Prentice Hall, 2006), pg xxi.
320. Department of the Army, Field Manual 22-100, *Army Leadership – Be, Know, Do*, (Washington: Department of the Army, August 1999), pg 5-16.
321. Marc Effron, Shelli Greenslade, and Michelle Salob, “Growing Great Leaders: Does it Really Matter,” *Human Resource Planning*, 2005, 28, 3, pg 22.
322. Ikujiro Nonaka, “The Knowledge-creating Company,” *Harvard Business Review on Knowledge Management*, (Boston: Harvard Business School Press, 1998), pg 38.
323. James W. Walker and James M. LaRocca, “Talent Pools: The Best and the Rest,” *Human Resource Planning*, 2002, 25, pg 13.
324. Department of the Air Force, *AFDD 1-1: Leadership and Force Development*. (Washington: Department of the Air Force, 18 February 2006), pg 26.
325. Sunil J. Ramlall, “Measuring Human Resource Management’s Effectiveness in Improving Performance,” *Human Resource Planning*, 2003, 26, pg 57.
326. United States Government Accounting Office, *GAO-02-373SP: A Model of Strategic Human Capital Management*, March 2002, pg 23.
327. Sunil J. Ramlall, “Measuring Human Resource Management’s Effectiveness in Improving Performance,” *Human Resource Planning*, 2003, 26, pg 56.
328. Department of Defense, Director, Office of Force Transformation, *Elements of Defense Transformation*, October 2004, pg 6.
329. Department of the Air Force, *AFDD 1-1: Leadership and Force Development*. (Washington: Department of the Air Force, 18 February 2006), pg 36.

330. Department of the Army, Field Manual 22-100, *Army Leadership – Be, Know, Do*, (Washington: Department of the Army, August 1999), pg 2-1.
331. Donald J. Campbell and Gregory J. Dardis, “The Be, Know, Do Model of Leader Development,” *Human Resource Planning*, 2004, 27, 2, pg 27.
332. Jack Welch, *Winning*, (New York: Harper Collins, 2005), pgs 84 – 87.
333. Lisa Abrams, Dorothy Leonard, Mimi Shields, and Walter Swap, “Using Mentoring and Storytelling to Transfer Knowledge in the Workplace,” *Journal of Information Management Systems*, Summer 2001, pg 99.
334. Department of the Army, Field Manual 22-100, *Army Leadership – Be, Know, Do*, (Washington: Department of the Army, August 1999), pg 4-1.
335. Jamie Barber, “Nine Steps to Making the Most of Your HR Metrics,” *Human Resources Magazine*, <http://www.humanresourcesmagazine.com>, 11 February 2006, pg 1.
336. Brian E. Becker and Mark A. Huselid, *The Workforce Scorecard*, (Boston: Harvard Business School Press, 2005), pg 160.
337. Dr. John Sullivan, “What are the Best HR Metrics for a Large Organization,” <http://www.erexchange.com/articles>, 26 July 2004.
338. Tom Davenport, “If the Shoe Fits,” *CIO – Australia’s Magazine for Information Executives*, <http://www.cio.com.au>, 10 April 1997.
339. United States Government Accounting Office, *GAO-05-629T: Key Elements Needed to Successfully Transform DOD Business Operations*, April 2005, pg 10.
340. Scott Leibs, “Building a Better Workforce,” <http://www.cfo.com>, 15 September 2005, pg 3.
341. PriceWaterHouseCoopers – Human Resource Services, “Key Trends in Human Capital: A Global Perspective,” *Saratoga Executive Summary*, January 2005, pg 7.
342. John W. Boudreau and Peter M. Ramstad, “Talent and the New Paradigm for Human Resource Management: From Professional Practices to Strategic Talent Decision Science,” *Human Resource Planning*, 2005, 28, 2, pg 25.
343. Michael Robert, *The New Strategic Thinking – Pure & Simple*, (New York: McGraw-Hill, 2006), pg 33.

344. Ibid., pg 29.
345. Department of Defense, Director, Office of Force Transformation, *Elements of Defense Transformation*, October 2004, pg 2.
346. United States Government Accounting Office, *GAO-05-480: Management Process Can Be Strengthened for New Technology Transition Programs*, June 2005, pg 23.
347. Lieutenant General Tom Hobbins, "Today's Warfighter Requires Street Smart Architecture," *Intercom Magazine*, October 2005, pg 5.
348. Ibid., pg 5.
349. Madan Birla, *FedEx Delivers*, (Hoboken, NJ: John Wiley & Sons, Inc, 2005), pg 111.
350. Lieutenant General Leslie Kenne, "Air and Space Core Competencies – Bringing Decisive Effects to Joint Warfighting," *Intercom Magazine*, April 2003, pg 3.
351. Gartner Consulting, *Communications and Information Workforce Transformation Briefing*, 9 August 2005, slide 9.
352. Vice Admiral Evan Chanik and Ryan Henry, "News Briefing with Ryan Henry and Vice Admiral Evan Chanik," <http://www.defenselink.com>, 3 February 2006.
353. Michael Robert, *The New Strategic Thinking – Pure & Simple*, (New York: McGraw-Hill, 2006), pg 38.
354. Department of the Air Force, *AFDD 1-1: Leadership and Force Development*. (Washington: Department of the Air Force, 18 February 2006), pg 20.
355. Michael Robert, *The New Strategic Thinking – Pure & Simple*, (New York: McGraw-Hill, 2006), pg 17.
356. Colonel Steve Spano, "One Air Force, One Enterprise – Enterprise Information Management Provides on Demand Information When, Where It's Needed," *Intercom Magazine*, October 2005, pg 6.
357. Major Scott Hamilton, "Providing Transformation Command and Control Capabilities to the Warfighter," *Intercom Magazine*, March 2005, pg 23.
358. Major General Charles E. Croom, Jr., "Global Information Grid – Piecing it all Together," *Intercom Magazine*, February 2004, pg 53.

359. Secretary of the Air Force Office of Warfighting Integration and Chief Information Officer, *FY2006 Strategic Plan*, (Washington: Department of the Air Force, 15 November 2005), pg 3.
360. Myra Liwanag and Joe Wert, "HR as Strategic Partner," *Sibson*, <http://www.imakenews.com/sibson>, 24 June 2002.
361. Donald Ruse, "People Portfolio Management," <http://www.imakenews.com>, 12 March 2002.
362. Air Force Command, Control, Intelligence, Surveillance, and Reconnaissance Center, "Star Planners," *Intercom Magazine*, February 2005, pg 11.
363. Department of Defense, "Quadrennial Defense Review Report," (Washington: Department of Defense, 6 February 2006), <http://www.defenselink.com>, pg 55.
364. United States Government Accounting Office, *GAO-06-219: DOD Business Systems Modernization – Important Progress Made in Establishing Foundational Architecture Products and Investment Management Practices, But Much Work Remains*, November 2005, pg 5.
365. Lieutenant General Tom Hobbins, "Today's Warfighter Requires Street Smart Architecture," *Intercom Magazine*, October 2005, pg 5.
366. John Gilligan, "Global Information Grid – An Evolution in Information," *Intercom Magazine*, February 2004, pg 6.
367. Lieutenant General Leslie Kenne, "Air and Space Core Competencies – Bringing Decisive Effects to Joint Warfighting," *Intercom Magazine*, April 2003, pg 5.
368. Department of Defense, "Quadrennial Defense Review Report," (Washington: Department of Defense, 6 February 2006), <http://www.defenselink.com>, pg 58.
369. *Ibid.*, pg 53.
370. Gary Hamel and C.K. Prahalad, *Competing for the Future*, (Boston: Harvard Business School Press, 1994), pg 110.
371. Ralph Christensen, *Roadmap to Strategic HR*, (New York: American Management Association, 2006), pg 211.
372. Brian E. Becker and Mark A. Huselid, *The Workforce Scorecard*, (Boston: Harvard Business School Press, 2005), pg 52.

373. United States Government Accounting Office, *GAO-05-833: Defense Space Activities – Management Guidance and Performance Measures Needed to Develop Personnel*, September 2005, pg 20.
374. Colonel David Cotton, “Mission Success – Core Competencies Provide Foundation for Combat Capability,” *Intercom Magazine*, March 2005, pg 6.
375. RAND, *Understrength Air Force Officer Career Fields – A Management Approach*, 2005, pg 42.
376. Colonel Steve Spano, “The Blueprint for Relevancy – Innovative Information Management Concepts Lead to Changes across Air Force Functional Communities,” *Intercom Magazine*, November 2005, pg 7.
377. Scott Leibs, “Building a Better Workforce,” <http://www.cfo.com>, 15 September 2005, pg 3.
378. Intralearn Software, “Intralearn and Skillview: Skills Management,” <http://www.intralearn.com>, pg 2.
379. James W. Walker and James M. LaRocca, “Talent Pools: The Best and the Rest,” *Human Resource Planning*, 2002, 25, pg 12.
380. Thomas P. Bechet, *Strategic Staffing Guidebook*, <http://www.hrbiz.com>, pg 42.
381. Department of Defense, “Quadrennial Defense Review Report,” (Washington: Department of Defense, 6 February 2006), <http://www.defenselink.com>, pg 45.
382. United States Government Accounting Office, *GAO-04-39: Human Capital – Key Principles for Effective Strategic Workforce Planning*, December 2003, pg 4.
383. Secretary of the Air Force Office of Warfighting Integration and Chief Information Officer, *FY2006 Strategic Plan*, (Washington: Department of the Air Force, 15 November 2005), pg 9.
384. Department of the Air Force, *AFDD 1-1: Leadership and Force Development*. (Washington: Department of the Air Force, 18 February 2006), pg 27.
385. RAND, *Integrated planning for the Air Force Senior Leader Workforce*, 2004, pg xii.
386. Scott Leibs, “Building a Better Workforce,” <http://www.cfo.com>, 15 September 2005, pg 3.

387. Wayne Brockbank and David Ulrich, *HR – The Value Proposition*, (Boston: Harvard Business School Press, 2005), pg 90.
388. Ibid., pg 75.
389. RAND, *Understrength Air Force Officer Career Fields – A Management Approach*, 2005, pg 58.
390. United States Government Accounting Office, *GAO-04-39: Human Capital – Key Principles for Effective Strategic Workforce Planning*, December 2003, pg 4.
391. Jim Garamone, “Quadrennial Review Allows DOD to Make Vector Changes,” *Air Force Print News*, 3 February 2006.
392. Tom Davenport, “If the Shoe Fits,” *CIO – Australia’s Magazine for Information Executives*, <http://www.cio.com.au>, 10 April 1997.
393. Justin Menkes, *Executive Intelligence*, (New York: Harper Collins, 2005), pg 59.
394. Donald Ruse, “People Portfolio Management,” <http://www.imakenews.com>, 12 March 2002.
395. Thomas P. Bechet, *Strategic Staffing Guidebook*, <http://www.hrbiz.com>, pg 2.
396. John W. Boudreau and Peter M. Ramstad, “Talent and the New Paradigm for Human Resource Management: From Professional Practices to Strategic Talent Decision Science,” *Human Resource Planning*, 2005, 28, 2, pg 22.
397. RAND, *Understrength Air Force Officer Career Fields – A Management Approach*, 2005, pg xiv.
398. Rob C. Thomas II, “Managing Change through Workforce Transformation,” *Intercom Magazine*, July 2004, pg 5.
399. United States Government Accounting Office, *GAO-04-39: Human Capital – Key Principles for Effective Strategic Workforce Planning*, December 2003, pg 4.
400. Department of Defense, “Quadrennial Defense Review Report,” (Washington: Department of Defense, 6 February 2006), <http://www.defenselink.com>, pg 76.
401. Mike Losey, Sue Meisinger, and Dave Ulrich, *The Future of Human Resource Management*, (Hoboken, NJ: John Wiley & Sons, Inc, 2005), pg 87.

402. Donald J. Campbell and Gregory J. Dardis, "The Be, Know, Do Model of Leader Development," *Human Resource Planning*, 2004, 27, 2, pg 37.
403. Brian E. Becker and Mark A. Huselid, *The Workforce Scorecard*, (Boston: Harvard Business School Press, 2005), pg 50.
404. Ibid., pg 176.
405. United States Government Accounting Office, *GAO-05-833: Defense Space Activities – Management Guidance and Performance Measures Needed to Develop Personnel*, September 2005, pg 15.
406. United States Government Accounting Office, *GAO-04-39: Human Capital – Key Principles for Effective Strategic Workforce Planning*, December 2003, pg 20.
407. Ibid., pg 20.
408. RAND, *Air Force Procurement Workforce Transformation Lessons from the Commercial Sector*, 2004, pg xix.
409. Richard Finn and Davis S. Weiss, "HR Metrics that Count: Aligning Human Capital Management to Business Results," *Human Resource Planning*, 2005, 28, 1, pg 38.
410. Ibid., pg 38.
411. Carla Joinson, "HR Metrics: The Business Case," <http://www.cen-chemjobs/chemhr>, October 2002.
412. Bernasia Halikowa, Mark Hoyal, and Paul Osgood, "Do Human Resources Really Add Value to a Business," *Management Quarterly*, May 2003, pg 25.
413. Myra Liwanag and Joe Wert, "HR as Strategic Partner," *Sibson*, <http://www.imakenews.com/sibson>, 24 June 2002.
414. Brian E. Becker and Mark A. Huselid, *The Workforce Scorecard*, (Boston: Harvard Business School Press, 2005), pg 68.
415. Department of the Air Force, *FY2007 Air Force Posture Statement*, (Washington: Department of the Air Force, 2 March 2006), pg 45.

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<p>14. ABSTRACT Senior Air Force leaders tout its Airmen as its most important asset. In 2003, the Air Force launched the force development program—and yet it still has not produced the momentum and results emphasized in the worldwide fan-fare in 2004. Air Force Doctrine Document 1-1, <i>Leadership and Force Development</i> doctrine explicitly outlines the underlying themes of force development: experience, skills, training, education, and performance feedback. However, the Air Force has not instituted the structure, supplied the resources, or mandated the governance to make the program a success. Yet, in every sight picture, senior briefing, leadership articles, flight plans, and transformation plan, people constantly read about how force development is transforming the Air Force and its people. This is not the case, as there's a disparity between force development strategy and intent as well as the implementation and execution of the program.</p> <p>To illustrate the deficiencies, I've dissected the communications officer force development initiatives and provided examples—developing actions for leadership to take to implement a force development program. The program encompasses career field strategy, management, competencies management, development processes, and metrics. The result is a fully comprehensive career field program that institutes force development concepts outlined in Air Force doctrine.</p>					
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