TAILORED FITNESS: CULTURE CLASH IN THE QUEST FOR COMBAT-FIT AIRMEN

BY

DAVID I. STAMPS, Maj, USAF

A THESIS PRESENTED TO THE FACULTY OF
THE SCHOOL OF ADVANCED AIR AND SPACE STUDIES
FOR COMPLETION OF GRADUATION REQUIREMENTS

SCHOOL OF ADVANCED AIR AND SPACE STUDIES
AIR UNIVERSITY
MAXWELL AIR FORCE BASE, ALABAMA
JUNE 2014

Report Documentation Page

Form Approved
OMB No. 0704-0188

1. REPORT DATE	2. REPORT TYPE	3. DATES COVERED
JUN 2014		**00-00-2014 to 00-00-2014**

4. TITLE AND SUBTITLE	5a. CONTRACT NUMBER
Tailored Fitness: Culture Clash In The Quest For Combat-Fit Airmen	5b. GRANT NUMBER
	5c. PROGRAM ELEMENT NUMBER
6. AUTHOR(S)	5d. PROJECT NUMBER
	5e. TASK NUMBER
	5f. WORK UNIT NUMBER
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) **School of Advanced Air And Space Studies,,Air University,,Maxwell Air Force Base,,AL**	8. PERFORMING ORGANIZATION REPORT NUMBER
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)	10. SPONSOR/MONITOR'S ACRONYM(S)
	11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION/AVAILABILITY STATEMENT
Approved for public release; distribution unlimited

13. SUPPLEMENTARY NOTES

14. ABSTRACT

Over the past several decades, USAF senior leaders have expressed hope for and have even directed the establishment of fitness as a lifestyle. The term fitness culture in this essay implies an emphasis on fitness as internally motivated rather than in response to external pressures, such as evaluations. Although leaders have attempted to develop an Air Force fitness culture, their intent has been inconsistent with other, more dominant cultural influences within the Air Force. The evidence will illustrate how competing influences make the Air Force as an institution ambivalent toward physical fitness, and thus why a fitness culture has not taken root within the service. This thesis will present a two-pronged recommendation based on both a short- and long-term effort. The short-term recommendation will call for AFSC-specific standards, while the long-term effort will still focus on cultivating and then strengthening a service-wide fitness culture. Ultimately, the goal is for Airmen not only to take charge of their fitness program, but also to incorporate a fitness lifestyle consistent with deeply held facets of its own organizational culture. If implemented, the recommendations aim to tailor fitness programs to the diverse warfighting needs of its Airmen while fostering a fitness lifestyle in the service writ large to increase workplace productivity and cultivate a healthier force.

15. SUBJECT TERMS

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE			
unclassified	**unclassified**	**unclassified**	**Same as Report (SAR)**	**69**	

APPROVAL

The undersigned certify that this thesis meets master's-level standards of research, argumentation, and expression.

_____

Col. RICHARD BAILEY

_____

Dr. THOMAS HUGHES

DISCLAIMER

The conclusions and opinions expressed in this document are those of the author. They do not reflect the official position of the US Government, Department of Defense, the United States Air Force, or Air University. In accordance with Air Force Instruction 51-303, it is not copyrighted, but is the property of the United States government.

ABOUT THE AUTHOR

Major David Stamps is currently a student at the School of Advanced Air and Space Studies. He is a senior Navigator with more than 1,900 hours of flight time, as well as USAF Weapons School graduate, instructor and evaluator experience in his primary weapon system, the F-15E. His career has included operational assignments at Mountain Home AFB, Seymour Johnson AFB, and Nellis AFB. Major Stamps is a veteran of Operations Enduring Freedom and Iraqi Freedom. He holds a bachelor's degree in Political Science from the University of Nebraska, Lincoln, a master's degree in Business Administration from American Military University, and a master's degree in Military Operational Art and Science from Air Command and Staff College. Prior to his current assignment, he served as the Director of Staff, United States Air Force Weapons School, where he oversaw operations for 18 Weapons Instructor Course (WIC) squadrons and 23 WICs. His next assignment is to the United States Strategic Command (USSTRATCOM) where he will serve as a joint service strategist for nuclear deterrence within the J5.

ACKNOWLEDGMENTS

I would like to take this opportunity to acknowledge the SAASS professors and students. In some way, each individual challenged me to think critically and contributed to my intellectual development while writing this thesis.

I am honored to be able to be mentored by my thesis advisor, Col (Dr.) Richard Bailey. It was a pleasure to work closely with such a passionate and invested Airman. His guidance and encouragement led me to success during my time at SAASS. Col Bailey was there when I needed course correction or a sounding board for my ideas. He helped me mold my unconventional topic into something strategic and applicable. Not only is he an amazing Air Force leader, but an outstanding mentor and friend. I am eternally grateful for his support and friendship. Special thanks to Dr. Tom Hughes for being the glue when things seemed to be falling apart.

I would like to thank Major Tim Curry for all of his support, advice and prayers. His dedication to his family, faith, and service has been motivating and his encouragement kept me focused day-in and day-out. I cannot thank him enough. A huge debt of gratitude is also extended to Major Raj Agrawal for incredible technical support and helping me through my Microsoft Word struggles. To Major Zach Hall...you always found a way to bring light to the dim moments. Thank you!

Finally, I want to express my heart-felt appreciation to my family. Thank you to my mother, for always believing in me and showing me through action that hard work pays off. She has been a role model and pillar of strength throughout my life. The gratitude that I have for the prayerful support of my mother and father-in-law is too great for words. You love and encouragement has been a lifesaving blessing through this entire process. I am extremely grateful for my wife for her love, prayers, and patience during our SAASS journey. Her encouragement, expert insight, and support kept me focused on achieving my goals. I also thank my son for his unconditional love and understanding. His calming humor got me through the challenging moments, and his continued sacrifices as a military child are awe-inspiring.

ABSTRACT

Over the past several decades, USAF senior leaders have expressed hope for and have even directed the establishment of fitness as a lifestyle. The term fitness culture in this essay implies an emphasis on fitness as internally motivated rather than in response to external pressures, such as evaluations. Although leaders have attempted to develop an Air Force fitness culture, their intent has been inconsistent with other, more dominant cultural influences within the Air Force. The evidence will illustrate how competing influences make the Air Force as an institution ambivalent toward physical fitness, and thus why a fitness culture has not taken root within the service. This thesis will present a two-pronged recommendation based on both a short- and long-term effort. The short-term recommendation will call for AFSC-specific standards, while the long-term effort will still focus on cultivating and then strengthening a service-wide fitness culture. Ultimately, the goal is for Airmen not only to take charge of their fitness program, but also to incorporate a fitness lifestyle consistent with deeply held facets of its own organizational culture. If implemented, the recommendations aim to tailor fitness programs to the diverse warfighting needs of its Airmen, while fostering a fitness lifestyle in the service writ large to increase workplace productivity and cultivate a healthier force.

CONTENTS

Illustrations

Figure

Chapter 1

Introduction

I believe that the Good Lord gave us a finite number of heartbeats and I'm damned if I'm going to use up mine running up and down a street.

-Neil Armstrong

A few years ago, a humorous take on the classic motivational posters made its way through Air Force (and other service) email chains. The attachment showed a photo of three sloppy US Air Force Airmen running in Physical Training (PT) gear near a sleek aircraft static display.[1] The caption underneath read:

Air Force P.T.:
We Should Probably Stop Lying to Ourselves

This cartoon signaled something important – Air Force ambivalence toward physical fitness. Air Force leaders have promoted physical fitness since its inception, yet perceptions still exist that doubt the presence of a dominant fitness culture? Put simply, *why hasn't the culture of a fitness lifestyle taken root in the U.S. Air Force?*

Over the past several decades, USAF senior leaders have expressed hope for and have even directed the establishment of fitness as a lifestyle. The term *fitness culture* in this essay implies an emphasis on fitness as internally motivated rather than in response to external pressures, such as evaluations. Although leaders have attempted to develop an Air Force fitness culture, their intent has been inconsistent with other, more dominant cultural influences within the Air Force. This thesis will illustrate how competing influences make the Air Force as an

[1] The poster can be viewed at the following website: http://s214.photobucket.com/user/manchilde/media/motivational%20posters/airforcept.jpg.html

institution ambivalent toward physical fitness, and thus why a fitness culture has not taken root within the service.

Fitness is an admirable goal for the Air Force, but senior leaders should consider *how* specifically a fitness culture is beneficial. Here, one must draw a distinction between fitness as it relates to *warfighting capabilities* and fitness as it relates to *workplace productivity*. Arguments that tie physical fitness to core Air Force warfighting capabilities neglect the influence that technological advances have had on physical requirements, particularly in a service like the Air Force, which often values its advanced machinery over its manpower. A select few Air Force career fields are tied directly to physically demanding warfighting capabilities, such as combat control, para-rescue, firefighting, and security forces. But the operational control of space and cyber systems, manned and unmanned aircraft employment, and intelligence gathering often times do not require elite standards of physical fitness. In essence, as opposed to the Marines, where *every* Marine is a rifleman, the Air Force is a diverse organization with varying physical requirements based on differing mission sets. This *is not* to imply that fitness has no place within the Air Force. On the contrary, just as civilian entities are focusing more and more on workplace physical fitness, the Air Force can make improvements to its *workplace productivity* by fostering more of a fitness lifestyle. And for those career fields with high physical demands, the Air Force should also consider tailoring fitness programs to meet their warfighting requirements.

Since its birth in 1947, the United States Air Force (USAF) has defined its identity through the artifacts of machinery and technology. The airplane, missile, rocket, and computer system are the instruments Airmen use to execute the mission of the USAF. In order to assess the potential success of its mission areas, the USAF has developed a robust

evaluation system. Operational Readiness Inspections, Nuclear Certifications, Aircrew proficiency check rides, and Annual Standardization and Evaluation exams are just a few of the evaluation programs that make up an Airman's operational routine. The Air Force Physical Fitness test is one of these evaluations that both define its fitness program and create requirements for its Airmen. But unlike other evaluation regimes, which have been key to the Air Force success, fitness tests have largely inhibited and not enhanced the establishment of a fitness culture.

The current USAF evaluation-focused physical fitness program is at a crossroads. In an environment of continually shrinking military budgets, senior leaders must consider steps that reflect sound fiscal responsibility. Workplace productivity becomes strategically significant as greater chunks of Air Force budgets are being spent on medical costs, lost productivity, and absenteeism. To make matters worse, this dilemma is occurring within the context of unsettling national health trends. The American trend toward climbing obesity rates is nothing surprising. Obesity rates for military-aged youth have substantially increased over the past several years. The graphic below illustrates this trend from 1986 to 2009.[2] During the same period, technological advancements may have progressed to the point at which brain-power may be more important to today's warfighter than physical power, at least for certain career fields. Again, this is not to suggest that physical fitness is not important in today's Air Force because of its dividends in increased productivity, morale, and lower absenteeism. If the obesity trend continues, it may eventually affect recruiting efforts, but perhaps even more importantly, health care costs will likely continue to climb and

[2] Illustration taken from Center for Disease Control and Prevention Young Adult Obesity Rates Web Site: http://climatecycle.com/newsite/wp-content/uploads/2012/02/cdc_obesity.png

take a larger share of overall budgets, which then has the potential to degrade Air Force combat effectiveness.

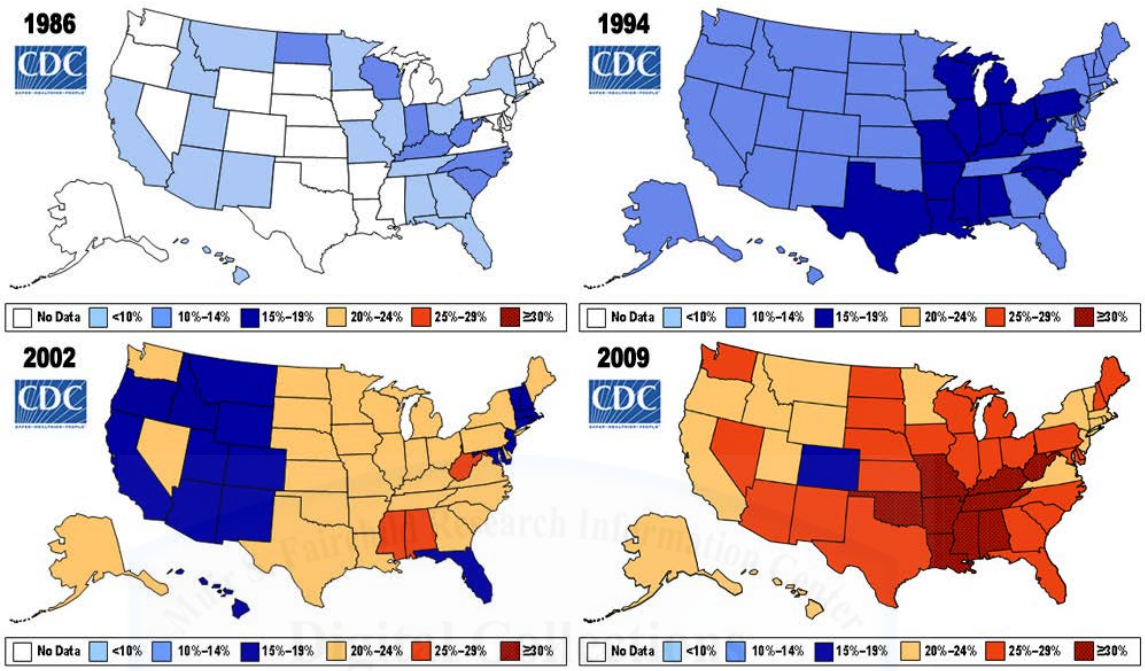

Figure 1: Trends in National Obesity Rates

Source: Center for Disease Control and Prevention Young Adult Obesity Rates Web Site: http://climatecycle.com/newsite/wp-content/uploads/2012/02/cdc_obesity.png

The purpose of this thesis is to help explain why a fitness lifestyle culture remains elusive in the U.S. Air Force. Is it possible for the USAF to maintain a service-wide fitness standard for its Airmen that meets the varying needs of its warfighters, while at the same time fostering an optimum productivity for all? One cannot fully answer this question without first identifying what has prevented a fitness culture from thriving. Put simply, past approaches have not looked at this topic through the proper lens. The USAF has attempted to create a fitness culture while ignoring stronger, more influential cultural Air Force

factors. Senior leaders have attempted to create a thriving fitness environment rather than evolving its fitness program both to meet the changing physical demands of its certain warfighters while fostering increased workplace productivity. As Chapter 3 will show, they may have been too quick to connect physical fitness to *warfighting capabilities* instead of trumpeting the *increased productivity* that a fitness culture helps to support. Immediate action for change may be available to Air Force leaders to provide a significant positive impact on their Airmen, but they may need to think differently about the root of the problem.

Poor strategy is often a result of looking too far into the future rather than recognizing immediate problems. As Richard Rumelt writes, "The core content of a strategy is a diagnosis of the situation at hand, the creation or identification of a guiding policy for dealing with the critical difficulties, and a set of coherent actions."[3] Rather than attempting to alter elements of an established Air Force culture, there ways to respond to this fitness challenge while respecting strong cultural preferences for machine over man?[4] Although senior leaders say they want to create a fitness culture mindset among their Airmen, these efforts often take a generation or more. The challenge facing Air Force leadership, then, is to continue long-term efforts at generating a fitness culture but ensure that they are respectful of competing cultural influences, while at the same time considering short-term efforts to increase workplace productivity.

To answer why a fitness culture has yet to take root in the Air Force, this thesis will begin with an exploration of Edgar Schein's organizational culture model. Chapter 2 will discuss the variables that

---

[3] Richard P Rumelt, *Good Strategy Bad Strategy: The Difference and Why It Matters.* (New York: Crown Business, 2011),79.

[4] Builder, Carl H. *The Masks of War: American Military Styles in Strategy and Analysis.* (Baltimore: The RAND Corporation, 1989),19.

influence organizational culture and how specifically leaders try to change it. It will discuss the elements that shape the way a culture selects its identifiable artifacts and how these artifacts in turn help the organization identify itself. Then it will discuss how an organization's inward values and beliefs mold the image in which people view both those within and outside the organization. Finally, it will detail how the underlying assumptions the organization holds shape its overall mindset. Ultimately, the chapter will emphasize the concepts of *artifacts* and *espoused beliefs*. These two elements, particularly when in conflict with each other, can create inconsistencies between what leaders *say* is important, and what actually *is* valued. Chapter 2 will only introduce these concepts in a general way. The Analysis section in Chapter 4 will define Air Force artifacts and espoused beliefs, particularly as they relate to fitness, and show how their inconsistencies make the development of a fitness culture difficult.

Between the model and the analysis, however, some historical background will help to illustrate exactly what senior leaders have attempted over the years and suggest why these approaches have fared poorly. Chapter 3, Historical Background, will provide a brief synopsis of the major eras that help define the Air Force physical fitness program's past. It focuses on events or leaders serving as catalysts for programmatic change. A cursory examination will reveal that the changes made to the program seem to have been reactions to outside events or trends rather than based on specific Air Force career field needs. It also reveals that those changes were inconsistent with stronger Air Force cultural values. Over the decades, Air Force leaders implemented different fitness programs in an effort to create a fitness culture. Importantly, many leaders also used warfighting capabilities as the foundation for their efforts, and in a few instances, even used warfighting concepts in their slogans. While the overall goal was

praiseworthy, the approaches were not. Blanket approaches might be possible when addressing the issue of service-wide workplace productivity, but physical requirements for warfighting differ greatly depending on Airmen's Air Force Specialty Codes (AFSCs). Fitness programs have not been fully successful in creating an Air Force fitness culture because Airmen have never fully *owned* the program. In a fitness culture, Airmen would want to be fit for fitness' sake, to meet an acceptable group norm, or because of mission specific demands. Instead, Airmen oftentimes look at fitness as a way to pass recurring evaluations. Thus, the historical background identifies a potential divergence between antiquated physical *standards* and evolving physical *requirements*. These two elements combined are contributing factors to the USAF's ambivalence toward fitness. Ultimately, Chapter 3 will provide the historical insight needed to form a foundation for recommendations on the future way ahead for the USAF fitness program.

Chapter 4 will analyze two of Edgar Schein's organizational culture elements, artifacts and espoused beliefs, as they apply to the Air Force. It will start with espoused beliefs, focusing on both formal Air Force Instructions (AFIs) as well as comments from senior leaders dealing with fitness. A discussion of assessment will help bridge the gap between these espoused beliefs and the artifacts of Air Force culture, namely technology and machinery, which tend to emphasize the impact of equipment over manpower in meeting core Air Force missions. When an institution *says* it values one thing—fit Airmen—but *actually* values something else more—an embrace of technological machinery to fight and win wars—disharmony is possible. Although this research attempts to explain why a fitness culture hasn't taken root, fitness as a lifestyle is still a worthwhile goal because of its benefit to workplace productivity, and one the Air Force should attempt. Thus, Chapter 4 will conclude with a short analysis of why fitness is important to the service for the

health and mental acuity of its Airmen, as well as the long-term financial interests of the organization. The disharmony between competing cultural elements, coupled with a desire and need for continued efforts to foster a more fit Air Force, will tee up concluding recommendations.

The final chapter will present a two-pronged recommendation based on both a short- and long-term effort. The short-term recommendation will call for AFSC-specific standards, while the long-term effort will still focus on cultivating and then strengthening a service-wide fitness culture. Ultimately, the goal is for Airmen not only to take charge of their fitness program, but also to incorporate a fitness lifestyle consistent with deeply held facets of its own organizational culture. If implemented, the recommendations aim to tailor fitness programs to the diverse warfighting needs of its Airmen, while fostering a fitness lifestyle in the service writ large to increase workplace productivity and cultivate a healthier force.

Chapter 2

Organizational Culture Model

If you have been trying to make changes in how your organization works, you need to find out how the existing culture aids or hinders you.

-Edgar Schein

It is important for USAF leaders at all levels to understand the characteristics that shape the organizational culture of the USAF. This chapter will use Schein's three levels of organizational culture and allow the reader to grasp a foundational understanding of why organizations possess certain foundational beliefs and how an organization effectively undergoes change. In the process, this chapter will foreshadow some of the difficulties the Air Force has had in establishing a fitness culture, which is explored more fully in Chapter 4.

Without a fundamental understanding of the factors that influence organizational culture, leaders' attempts to implement change will inevitably fail.[1] Oftentimes, this is because of the divergence between new programs and policies and the foundational organizational artifacts and beliefs. One of the keys to understanding these dynamic cultural shifts lies within the role that mid-level leaders play. Within the Air Force, squadron commanders and flight commanders play a vital role as catalysts bridging the gap between the upcoming generation of Airmen and USAF senior leadership.

[1] Edgar H. Schein, *Organizational Culture and Leadership, 3rd Edition*. (San Francisco: Jossey-Bass, 2004),xi.

Definition of Organizational Culture

Schein defines organizational culture as a deeper level of basic assumptions and beliefs that are: learned responses to the group's problems of survival in its external environment and its problems of internal integration; are shared by members of an organization; that operate unconsciously; and that define in a basic taken for granted fashion in a organizations view of itself and its environment.[2] In the 1980s, Schein began his research on the model of organizational culture. By 2004, he identified three distinct levels in organizational culture. These three levels are (1) artifacts and behaviors, (2) espoused values, and (3) assumptions. Figure 2 details these three levels within organizational culture.[3]

[2] Edgar H. Schein, *Organizational Culture and Leadership 3rd edition,* 17.
[3] Figure 2 Taken from http://www.valuebasedmanagement.net/images/picture_schein_3_levels_culture.gif.

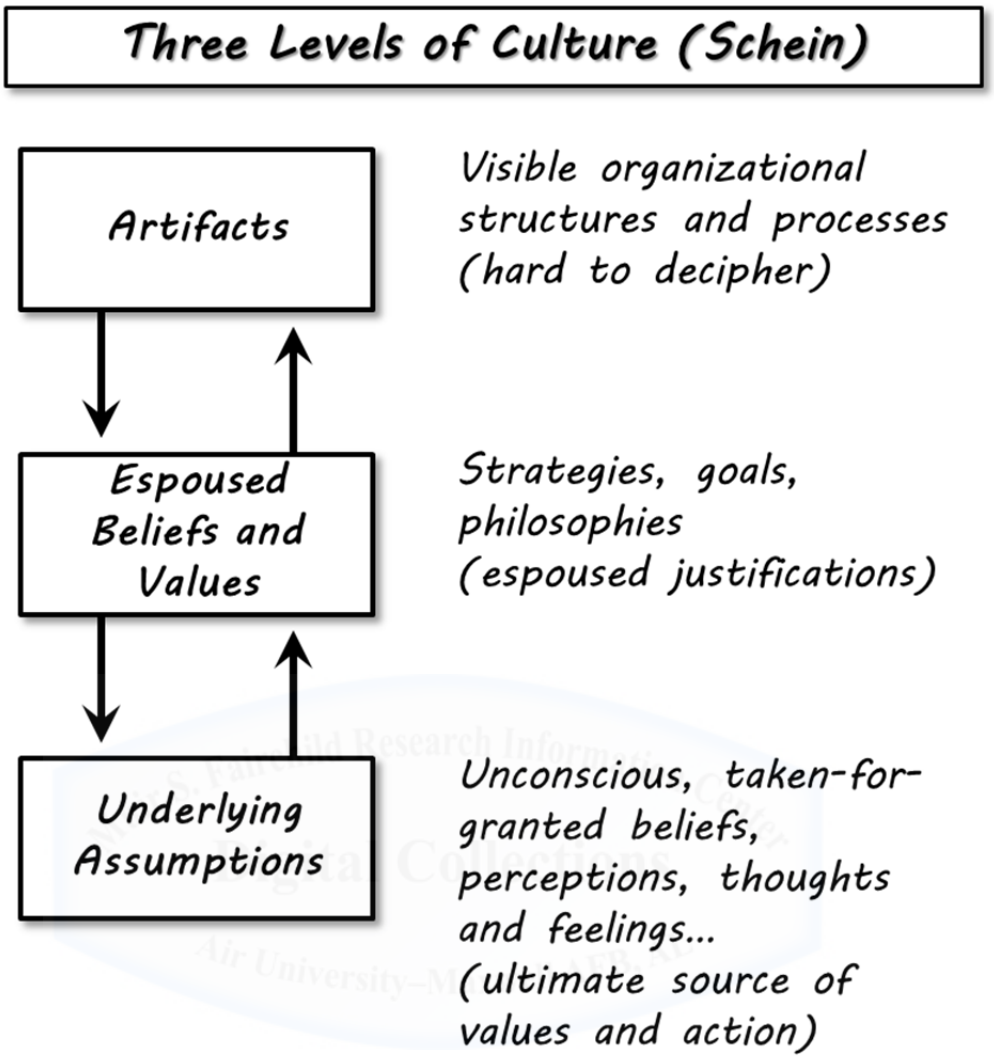

Figure 2: Levels of Organizational Culture

Source:
http://www.valuebasedmanagement.net/images/picture_schein_3_levels_culture.gif.

Artifacts

Artifacts include any visible or verbally identifiable specifics within an organization. These artifacts provide a foundation for how the organization identifies itself and how the outside population identifies the organization.[4] They usually include a tangible object or sets of objects. When new individuals enter an organization, or outsiders examine an organization, its artifacts are usually the first items that catch one's attention. Schein cautions against making any judgments about an organization's values or assumptions based on the initial impressions of artifacts. To gain a greater understanding of the organization, one must take a deeper look and analyze the organization's values.[5] For the USAF, it is important to identify what truly defines its identity. Are they the tools of the trade or the people behind the tasks? Chapter 4 will explore this question in detail.

Espoused Values and Beliefs

Espoused values are an organization's stated beliefs and rules of behavior. Individuals in an organization use these values and rules when conducting themselves both inside and outside of the unit environment. They begin to shape individual identities within the organization and govern their overall behavior, the way they act in professional and personal settings, and the way they speak publically and privately about the organization.[6] When new members enter an organization, they often use this value system and rules of behavior to model what they hope to and/or should become. Schein states that

[4] Edgar H. Schein, *Organizational Culture and Leadership 3rd Edition.* 25.
[5] Brian D. Yolitz, *Organizational Change: Is The United States Air Force Doing It Right?* (Maxwell Air Force Base: Air University, 1997),*?* 5.
[6] Edgar H. Schein, *Organizational Culture and Leadership 3rd Edition,* 29.

trouble may arise if a leader's espoused values are not in line with the general assumptions of the established culture.[7] Conflict also arises when an organization's espoused values are inconsistent with, or are not supported by, the group's actions. This occurs when what people say they *would* do given a set of circumstances differs than what they *actually* do under those same circumstances.[8] Put in basic terms, are leaders following the rules they implement? Moreover, are members doing what they profess to do? The USAF's Core Values are an easy place to identify three of its espoused values and beliefs: Integrity First, Service Before Self, and Excellence in All We Do. Chapter 4 will discuss in further detail the impact that these values have had upon the service's physical fitness program.

Shared Basic Assumptions

The final level within the organizational culture model contains the unit's shared basic assumptions. Schein writes that an institution deeply embeds these assumptions, often taken for granted behaviors, which are usually unconscious but constitute the essence of culture.[9] In other words, these are the unspoken rules that everyone within the organization recognizes as normal behaviors. These assumptions are typically so well integrated in the group dynamic that they are hard to recognize from within the unit.[10] Because members of the organization internalize these assumptions, they continue to reinforce established behaviors and guide the group in their feelings and decisions regarding specific situations. Assumptions can deal with basic aspects of life, such as: the correct way for the individual and group to relate to each other;

[7] Edgar H. Schein, *Organizational Culture and Leadership 3rd Edition,* 30.
[8] Edgar H. Schein, *Organizational Culture and Leadership 3rd Edition,* 29.
[9] Edgar H. Schein, *Organizational Culture and Leadership 3rd Edition,* 31.
[10] Edgar H. Schein, *Organizational Culture and Leadership 3rd Edition,* 31.

relative importance of work, family, and self-development; the proper role of men and women; and the nature of the family.[11]

Culture – Embedding Mechanisms

Each of these organizational culture levels is closely related and has an intertwined relationship with the other two. When leaders of an organization fail, often it is because they do not recognize how these relationships affect the organizational environment. If a leader wants to implement a lasting, successful change within the organization, he or she must recognize the relationship between these three levels of organizational culture. Schein writes, "One of the most powerful mechanisms that founders, leaders, managers, or even colleagues have available for communicating what they believe in or care about is what they systematically pay attention to."[12] Schein observes six primary embedding mechanisms that illuminate how a leader's focus can serve to reinforce cultural norms. Figure 3 lists these mechanisms:[13]

[11] Edgar H. Schein, *Organizational Culture and Leadership 3rd Edition*, 33
[12] Edgar H. Schein, *Organizational Culture and Leadership 3rd Edition*, 246.
[13] Table copied from: http://thinkprimed.com/wp-content/uploads/2010/01/Culture-Embedding-Mechanisms.jpg

Culture-Embedding Mechanisms

Primary Embedding Mechanisms	Secondary Articulation and Reinforcement Mechanisms
What leaders pay attention to, measure, and control on a regular basis.	Organization design and structure
How leaders react to critical incidents and organizational crises.	Organizational systems and procedures
Observed criteria by which leaders allocate scarce resources.	Organizational rites and rituals
Deliberate role modeling, teaching, and coaching	Design of physical space, facades, and buildings
Observed criteria by which leaders allocate rewards and status.	Stories, legends, and myths about people and events.
Observed criteria by which leaders recruit, select, promote, retire, and excommunicate organizational members.	Formal statements of organizational philosophy, values, and creed.

Figure 3: Culture Embedding Mechanisms

Source: http://thinkprimed.com/wp-content/uploads/2010/01/Culture-Embedding-Mechanisms.jpg

Culture embedding mechanisms "are the major tools that leaders have available to them to teach their organizations how to perceive, think, feel, and behave based on their own conscious and unconscious convictions."[14] Put simply, the actions taken by an organization's leadership can lay the foundation for the overall climate of the group. In a new organization, the climate will reflect the values of its leadership, but as the organization matures, it will begin to reinforce these beliefs independently. As the organization stabilizes over time, Schein states that design, structure, architecture, rituals, stories, and formal statements emerge as a second set of potential culture embedding mechanisms. Figure 3 also lists these secondary mechanisms.

According to Schein, these items are secondary articulation and reinforcement mechanisms. They become culture imbedding

[14] Edgar H. Schein, *Organizational Culture and Leadership 3rd Edition*, 246.

mechanisms only if they are consistent with its primary mechanisms. If there is inconsistency, members of the organization tend to ignore the secondary mechanisms, or they will be the source of conflict within the unit.[15] This phenomenon has important aspects for physical fitness in the Air Force, as will be discussed in Chapter 4.

Implications of the Model

As stated before, in order to ensure a lasting positive change within the organization, a leader must respect the relationship between these three organizational culture levels. Using these three levels of organizational culture, the following chapters will help outline the USAF's view of physical fitness and identify the cultural influences that have shaped current physical fitness standards. It will show that an inconsistency between its espoused values and its artifacts has stifled the creation of a service-wide fitness culture. In other words, what the organization says it values, and what it actually values, are not in perfect harmony.

There are two forms of organizational culture: *strict and regimented* cultures such as the medical field and *fluid* organizational cultures such as the Wall Street business environment.[16] The United States Air Force has implemented more rigid and structured standards of culture over time. The challenge is to find out what historically has formed the USAF's foundational beliefs and self-image and how this has influenced the shaping of its current physical fitness standards. In order to analyze effectively Air Force culture and its impact on the organization's fitness program, this essay will later apply Schein's model focusing specifically on artifacts and espoused values and beliefs. This thesis will not employ

[15] Brian D. Yolitz, *Organizational Change: Is the United States Air Force Doing It Right?* 8.
[16] Edgar H. Schein, *Organizational Culture and Leadership 3rd Edition,* 21.

Schein's third culture marker, assumptions, because this thesis argues explicitly that a fitness culture has not taken *deep* root in the Air Force.

On the surface, organizational structures may seem superficial but a deep and clear understanding is essential to grasp the values of the current culture and potentially implementing change. Schein writes, "We need to understand them not only because of their power but also because they help explain many of our puzzling and frustrating experiences in social and organizational life."[17] A study of the USAF's organizational culture not only offers keys to understand its physical fitness standards, but also clues on how they can possibly be changed to fit today's technologically advanced service.

For this study, the most important observation in Schein's work deals with the challenge of competing cultural influences. In this research, we explore the inconsistencies between the Air Force's espoused beliefs and its visible artifacts. According to Schein, "*in analyzing cultures, it is important to recognize that artifacts are easy to observe but difficult to decipher, and that espoused beliefs and values may only reflect rationalizations or aspirations.*" (Emphasis added)[18] This is central to the main thrust of this thesis. In other words, when we apply these two facets of organizational culture to the US Air Force in Chapter 4, inconsistencies that make the development of a physical fitness culture difficult at best come into full view. This will lead to the recommendation of a new approach for tackling more pressing problems with a short-term effort, while still focusing on strategies for a fitness culture creation, but recognizing the fact that such long-term efforts may take a generation or more to materialize.

---

[17] Edgar H. Schein, *Organizational Culture and Leadership, 4th Edition.* (San Francisco: Jossey-Bass, 2010), 7.
[18] Edgar H. Schein, *Organizational Culture and Leadership, 4th Edition.* 36.

If the Air Force is going to understand how its current physical fitness standards either enhance or restrict its current combat effectiveness, it must understand its own organizational culture. The historical background in Chapter 3 will highlight the development of the Air Force physical fitness program. It will reveal that senior leaders attempting to create a fitness culture faced significant challenges because of competing cultural influences. That will lay the foundation for an analysis of these competing cultural influences in Chapter 4, as well as implications for the organization's future.

Chapter 3

Historical Background

An army…whose physical power, like the muscles of an athlete, has been steeled by training in privation and effort– such an army is imbued with the true military spirit.

–Clausewitz

Before we can offer either short-term or long-term recommendations regarding the Air Force physical fitness program, it is prudent to examine the history of the program, and review any major shifts in thinking over time. This chapter offers a brief background on the seven major decision points concerning the fitness program, starting with the service's independence in 1947. This section will identify the catalysts for those changes. An understanding of what drove these changes will not only illuminate the cultural influences at play, but also serve as a foundation for the recommendations offered later in Chapter 5.

From its conception, the Air Force has sought the perfect fitness *assessment* program rather than the perfect *lifestyle* program that respects the different job requirements of its Airmen and increase workplace productivity for the entire force. USAF Colonel Thomas F. Roshetko states, "Through the decades, the Air Force Fitness Program walked a twisted path to arrive at its present status. Rather than focusing on assuring regular personal conditioning, the Air Force has spent decades searching for the latest and greatest annual evaluation tool."[1] At its birth in 1947, the USAF transplanted the Army fitness program into its service regulations. Although the service eventually devised its own regulations dictating program authority to its major

[1] Thomas F. Roshetko, *Air Force Fitness Culture: Are We There Yet?* (Maxwell Air Force Base: Air University, 2008),4.

commands, the USAF maintained these Army centric regulations until 1959.[2]

Why is this important? Students of Air Force history celebrate the independent spirit of pioneers like Billy Mitchell, who fought vigorously for a separate air service. His rationale for the push was that the country needed thinkers who could embrace *airmindedness,* meaning they could integrate airpower as the cornerstone of a military effort rather than just a force enhancement or a support function. "The pilots of these planes, from vantage points on high, see more of the country, know more about it, and appreciate more what the country means to them than any other class of persons."[3] Even though this renegade spirit was critical to the formation of an independent air force, it is ironic that the same spirit of uniqueness did not inspire separate fitness standards, especially considering Army and Air Force fitness requirements for core warfighting missions were *then* different and *have become more so* over time. The adoption of Army fitness standards in 1947 can be seen as the *original sin* of Air Force fitness programs.

In 1959 the Air Force School of Aviation Medicine concluded that "[T]he overall state of physical fitness in Air Force personnel is poor."[4] The primary catalyst for change during this time was the medical group's assessment that the current USAF physical fitness regulations were the root cause of the poor overall health of USAF personnel. This led to a restructuring of the program. In 1962, the USAF implemented plan 5BX. 5BX included five exercises that an Airman was to accomplish during a specified time, five days per week, once per day.[5] The Air Force

[2] Richard T. Gindhart, *The Air Force Physical Fitness Program. Is It Adequate?* (Maxwell Air Force Base: Air University, 1999), 15.
[3] William Mitchell, *Winged Defense: The Development and Possibilities of Modern Airpower – Economic and Military,* (Tuscaloosa: University of Alabama Press, 2009), 7.
[4] Richard T. Gindhart, *The Air Force Physical Fitness Program. Is It Adequate?* 15.
[5] Richard T. Gindhart, *The Air Force Physical Fitness Program. Is It Adequate?* 15.

instituted an annual fitness assessment along with an annual weight measurement in order to track the program's effectiveness. Plan 5BX remained the USAF fitness standard through 1969.[6]

In 1969, USAF Major Kenneth Cooper began to detail some innovative ideas regarding USAF fitness program regulations and assessments. During his time in the USAF, Dr. Cooper served as a flight surgeon and director of the Aerospace Medical Laboratory in San Antonio.[7] In an article published by the Journal of the American Medical Association, Dr. Cooper emphasized the importance of aerobic training for the overall health benefit of professional Airmen.

> Dr. Cooper developed the 12-minute and 1.5-mile fitness tests and the Aerobics Point System. His work with the Air Force and NASA launched his aerobics life work, but it was his own health crisis that made it personal. While water skiing at age 29, Dr. Cooper thought he was having a heart attack. At the hospital, his doctor told him he was simply out of shape, having gained 40 pounds and becoming inactive due to the stress of medical school. That first-hand experience catapulted the young doctor to lose weight and run his first marathon, the Boston Marathon, one year later. In 1970 Dr. Cooper resigned from the military to explore the relationship between cardiovascular fitness and health and longevity.[8]

Program officials rewrote USAF fitness standards to include a 1.5-mile run to assess the aerobic fitness of all Airmen. The catalyst for change in 1969 was the need for an assessment of cardiovascular health, not just muscular strength, based on Dr. Cooper's personal testimony and clinical studies. These changes remained in effect through 1989.

---

[6] Richard T. Gindhart, *The Air Force Physical Fitness Program. Is It Adequate?* 15.
[7] Cooper Institute Web Site: http://www.cooperaerobics.com/About.aspx
[8] Cooper Institute Web Site: http://www.cooperaerobics.com/About/Our-Leaders/Kenneth-H-Cooper,-MD,-MPH.aspx

Over the next several years there were subtle changes made to the run portion of the fitness test due to overexertion among Airmen and several deaths occurring during the following years.[9] Because of these obstacles, changes were made to the 1.5-mile run time charts and in 1999, the Air Force instituted an annual sub-maximal cycle ergometry test, more affectionately known as the *bike test*. The 1999 AFI 40-501 included a body composition measurement, but excluded strength and flexibility tests.[10] The timing of this change seems to indicate that the catalyst for the change was *reactionary* to external factors—in this case, fatalities on the run—rather than changes inspired by assessing the physical fitness demands of its Airmen. The catalyst for setting aside the 1.5-mile run time charts and adding an annual sub-maximal cycle ergometry test was therefore seemingly unconnected to proactive fitness lifestyle initiatives. Instead, it appeared that senior leaders, worried about continued fatalities, had to make substantive changes quickly rather than examine the true nature of the problem.

Dr. Cooper's influence did not stop, however, with the 1969 addition of a cardiovascular fitness assessment. His innovative thought brought a new way of thinking to overall USAF physical fitness. In this, Cooper may have been influenced by the fatalities occurring in Air Force physical fitness assessments in the 1990s and this led to not only an increased role but also to what many perceived as an overemphasis on aerobic and cardiovascular fitness. As Cooper stated in his book, *Aerobics*, "Muscular fitness is of some value, but is too limited. It concentrates on only one system in the body, one of the least important ones, and has limited beneficial effect on the essential organs or overall health. It is like putting a lovely new coat of paint on an automobile that really needs an engine overall. Endurance fitness must be your goal. It

[9] Richard T. Gindhart, *The Air Force Physical Fitness Program. Is It Adequate?* 16.
[10] Richard T. Gindhart, *The Air Force Physical Fitness Program. Is It Adequate?* 16.

will assure all the benefits of the training effect, improving not just your muscles, but also your lungs, your heart, and your blood vessels. It is the foundation on which all forms of fitness should be built."[11] This influence, coupled with challenges with the bike test, led to a reinstatement of the 1.5 mile run in the fitness assessment with published service-wide standards. These standards reflected (and still reflect) a one-dimensional physical fitness program designed to fit all AFSCs. As the next chapter will illustrate, a one-dimensional fitness program may be no match for other, more varied programs that reflect the Air Force's variety of AFSCs.

In 2001, the United States military commenced protracted combat operations in the Middle East. With an Air Expeditionary Force (AEF) mentality instilled into all Airmen, service members were required to deploy at a moment's notice and had to be physically ready to perform. As the overall mindset regarding combat readiness began to shift, the USAF Surgeon General's office reassessed its fitness guidelines. One presentation during this time highlighted the financial impacts of physical fitness just to one command (U.S. Air Force Space Command) in a single year:

- Direct Care Medical Costs = $23.9M
- Lost Productivity Costs = $4.2M
- Lost Work Days = 33,645 (approximately 157 lost full time equivalents)[12]

This evidence points as much to workplace productivity than to warfighting capability as a catalyst for fitness. In Air Force Space Command, however, where a deployed location is often stateside, perhaps the two are somewhat interrelated. During this time period, FE

[11] Richard T. Gindhart, *The Air Force Physical Fitness Program. Is It Adequate?* 18.
[12] Thomas F. Roshetko, *Air Force Fitness Culture: Are We There Yet?* 6.

Warren AFB Command Chief, Bruce Brady, made the following statement to senior leaders: "We spend a lot of money every year assisting our personnel in tobacco cessation and alcohol abuse treatment but do very little to assist those having trouble maintaining weight standards. It seems like we could do better."[13] The USAF fitness program's focus during this time sought to help Airmen maintain proper body fat standards. Airmen who failed to meet the body fat standards faced real consequences as outlined in AFI 40-502. And the Air Force followed through: "Between January 1993 and May 2001 the Air Force discharged 4,086 enlisted members and 76 officers for failure to meet weight and body fat management program standards, an astonishing 54 to 1 ratio."[14] Still, the evaluation program and not the broad emphasis on fitness as a lifestyle remained the center point for assessing program success.

In subtle but predictable ways, the USAF fitness mindset began to shift as multiple civilian studies began to conclude improved muscular and cardiovascular fitness routines led to more manageable and healthy body fat percentages. As a result, the Air Force implemented the *WarFit* program. The WarFit initiative required three workouts per week during duty hours, and one unit-led workout per week. The fitness assessment included strength, cardiovascular, and body composition measurements, which were measures of success.[15] Consider the name of the program. What does *WarFit* imply? Specifically, the terminology connotes that the Air Force implemented the program to improve Airmen's ability to *fight* through improved physical fitness. Not all Airmen are front-line, foreign-deployed warfighters, however, nor does the service ask or demand that. As Chapter 4 will illustrate, the Air Force's embrace of machinery allows

[13] Thomas F. Roshetko, *Air Force Fitness Culture: Are We There Yet?* 6.
[14] Thomas F. Roshetko, *Air Force Fitness Culture: Are We There Yet?* 6.
[15] Thomas F. Roshetko, *Air Force Fitness Culture: Are We There Yet?* 6.

many Airmen to employ combat capabilities from a distance, and with radically different physical requirements than a rifleman on the front lines.

"WarFit succeeded immediately in several areas, but most dramatically among those enrolled in the Weight and Body Fat Management Program (WBFMP). Upon initial WarFit testing, the Air Force identified 28 percent of those enrolled with fitness composite scores reflecting high health risks. Dramatically, 40 percent of enrollees with high health-risk indicators were able to achieve low risk standards after completing a 3-month intensive WarFit Program."[16] Although the WarFit program showed marks of overall success, USAF senior leaders questioned if they could afford their Airman daily duty time to accommodate physical activity requirements. Here, an interesting paradox existed. Senior leaders cultivated a program designed to improve warfighting capabilities through physical fitness, which (as Chapter 4 will illustrate) helped workplace productivity, but in the end questioned whether it could afford allowing Airmen time away from work to accomplish it. What message to the force did senior leaders send with their concerns? Fitness was important to senior leaders, but not as important as job performance. Thus, the next generation of senior leaders tried to find a balance.

The arguments for a strong USAF physical fitness program caught the attention of USAF Chief of Staff, General John Jumper in 2003. General Jumper addressed the Air Force as he changed the fitness program, stating the amount of time Airmen spend on fitness is not "consistent with the growing demands of our growing warrior culture. It is time to change that."[17] He went on to state, "Over the past several

[16] Thomas F. Roshetko, *Air Force Fitness Culture: Are We There Yet?* 6.
[17] Thomas F. Roshetko, *Air Force Fitness Culture: Are We There Yet?* 6.

months, I have received extremely positive feedback regarding our fitness changes. I've personally observed some outstanding leadership out in our Air Force—commanders and supervisors leading from the front and making fitness a priority in their daily schedules."[18] On 1 January 2004, the Air Force implemented AFI 10-248 Fit to Fight Fitness Program into official regulation. As with WarFit, the Fit to Fight campaign seemed to focus on improving physical fitness to increase the warfighting effectiveness of its Airmen rather than as a matter of general workplace productivity. The intent of General Jumper's Fit to Fight initiative was to transform the way the USAF thought about fitness. Within the first year of its implementation, Airmen saw an improvement to their overall fitness assessments.[19] In efforts to support the Fit to Fight initiative, Air Force Services Agency (AFSVA) restructured their approach to serving the USAF's fitness needs, and the USAF invested in the construction of better fitness facilities to encourage Airman to adopt a physically fit lifestyle.

During the 2005 – 2007 timeframe, the USAF saw an overall decline in "Poor" PFT scores. Figure 4 below highlights this data.[20] It should be pointed out that the Fit to Fight program seems to be the first serious attempt to influence culture through measures other than adjustments to its assessment program. As with any other cultural change, it may be a generation or more before a true fitness lifestyle culture is realized. And it may take more than simply the Fit to Fight measures to influence that creation. From 2007 to today, the USAF fitness program has seen little change, but the central focus has remained on the fitness assessment as a way to measure program success. Again, the ultimate goal in the creation of a fitness culture is to

[18] Thomas F. Roshetko, *Air Force Fitness Culture: Are We There Yet?* 6.
[19] Thomas F. Roshetko, *Air Force Fitness Culture: Are We There Yet?* 7.
[20] Thomas F. Roshetko, *Air Force Fitness Culture: Are We There Yet?* 16.

have Airmen interested in fitness for fitness' sake, rather than focused on upcoming assessments. Recently, the USAF has announced that it will be testing 24-hour fitness center hours in order to accommodate Airmen who work swing shift hours.[21] This will help encourage fitness seekers who may be unable to work out during regular business hours. But the jury is still out on whether the Air Force will (or can) achieve that goal.

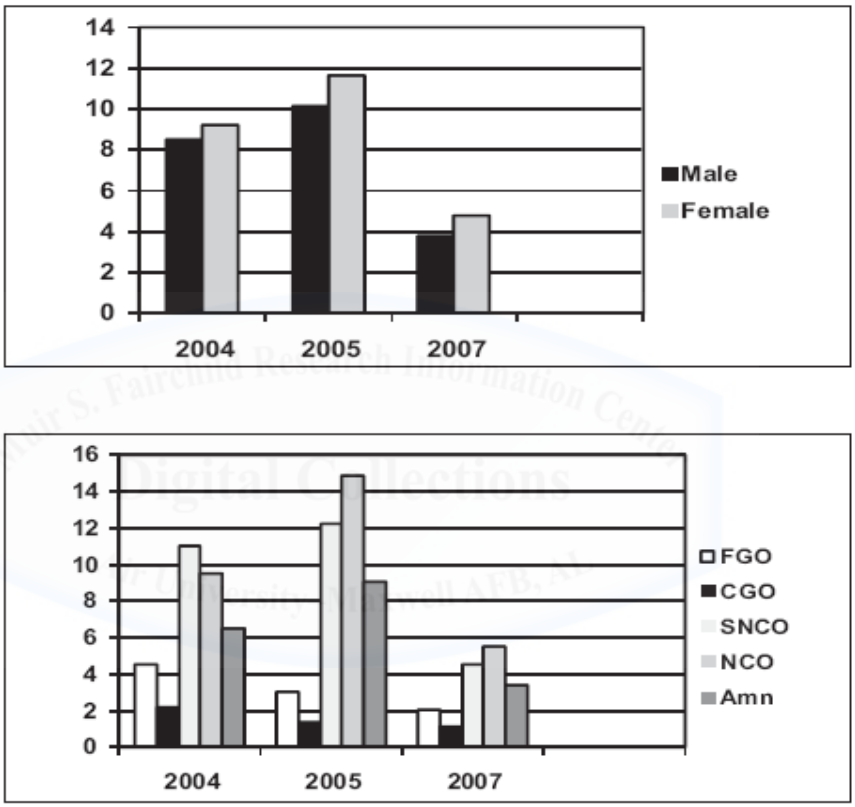

Figure 4: Fitness Score Trends

Source: Thomas F. Roshetko, Air Force Fitness Culture: Are We There Yet? 16.

[21] Debbie Gildea. "Air Force Personnel Center." *AF tests 24/7 fitness centers.* (December 18, 2012): http://www.afpc.af.mil/news/story.asp?id=123330360 (accessed February 5, 2014)

The 21 October 2013 AFI-36-2905 USAF Fitness Program manual still maintains a stove-piped focus on the fitness assessment itself. This is noticeably apparent when reading its summary of changes:

> The summary of changes include requiring those members who score 90 or above on their Fitness Assessment (FA) and test in all four components to only test once a year; made Airmen responsible for maintaining currency; added component exemptions; deleted fitness patches; standardized number of failures for discharge recommendation, established a Fitness Assessment Cell (FAC) to centralize and standardize the administration of FAs; set biannual testing requirements for RegAF, NGB (Title 10/Statutory Tour), and AFR members; revised component weighting and scoring based on health-fitness hierarchy; established requirements to score a composite 75 and meet the minimum component value for each component to earn a passing fitness assessment score; made any score below the minimum component value for each component read zero; provided targets in each component; set an Altitude Time Correction for the aerobic component (1.5 mile run and 2.0 kilometer walk) for installations at 5,250 feet above sea level and greater; amended the walk-test; added a body mass index (BMI) screen and body fat assessment (BFA) for those Airmen who fail the abdominal circumference measurement but pass all three other components with a score of 75 points out of the remaining 80 points; and Air Force Fitness Program appeal requests will now be initially reviewed and approved or denied by the Wing Commander or equivalent.[22]

This exam-focused program does little to create an USAF fitness culture, which this essay will discuss further in chapter 4. Furthermore, AFI-36-2905 does not support the overall commander's intent, which states,

> Being physically fit allows you to properly support the Air Force mission. The goal of the Fitness Program (FP) is to

[22] Department of the Secretary of the Air Force. *Air Force Instruction 36-2905: Fitness Program.* (Washington DC: Air Force Personnel Center, 2013), 2.

> motivate all members to participate in a year-round physical conditioning program that emphasizes total fitness, to include proper aerobic conditioning, muscular fitness training, and healthy eating. An active lifestyle will increase productivity, optimize health, and decrease absenteeism while maintaining a higher level of readiness. Commanders and supervisors must incorporate fitness into the Air Force culture establishing an environment for members to maintain physical fitness and health to meet expeditionary mission requirements.[23]

If the Commander's Intent is to foster a year-round fitness culture, then steps toward that realization must seek more than changes to periodic assessment programs.

Members of the Air Force understand that the PFT is a method of evaluating fitness, yet the system seems to have become *too* examination focused. Writ large and from its birth, the USAF has been a "results centric" organization. It has constantly felt the need of proving itself through the evaluation of its programs and systems. This in and of itself is a *good* thing. The purpose of this research is not to discount the value of assessments. They are a valuable tool in supporting and maintaining standards of behavior. But the historical background of the Air Force physical fitness program shows that it takes much more than adjustments to an assessment program to create or affect cultural norms. In many ways, the Air Force has assessed Airmen career paths throughout history on how well they operate their machines. This is partly because of the value the Air Force places on its artifacts, and often translated in its espoused beliefs. For example, an Operational Readiness Inspection in a flying unit often centers around aircraft sortie generation, mission success rates, on time statistics, etc. But when espoused beliefs are inconsistent with its valued visible artifacts, organizational change becomes problematic. In the next chapter, this

[23] Department of the Secretary of the Air Force. *Air Force Instruction 36-2905: Fitness Program.* 2.

thesis will examine how these cultural components are important, and why their incompatibilities can create challenges in the quest for an Air Force fitness culture.

Chapter 4

Analysis

If you don't like something change it; if you can't change it, change the way you think about it.

-Mary Engelbreit

Chapter 2 outlined Schein's model and his three primary levels of organizational culture. This chapter will concentrate on two, espoused beliefs and artifacts, and apply them to the US Air Force, paying particular attention to their effect on its physical fitness program. In essence, an incompatibility exists between Air Force espoused beliefs—translated here as what the service *says* it values—versus its artifacts—translated here as the visible manifestations of what it *actually* values. The assessment piece will help us bridge the gap between the two and offer an avenue for a short-term recommendation in Chapter 5.

Espoused Beliefs and Values

An espoused belief, as stated earlier, is something that the organization says it believes, which often translates into rules of behavior. A great example of the Air Force's espoused beliefs is its three Core Values. By examining these values, one is able to draw conclusions regarding the service's central, organizational beliefs. The Air Force website states, "Whoever you are and wherever you fit on the Air Force team, the Core Values are what you will live by and learn to cherish. The Core Values are much more than minimum standards. They remind us what it takes to get the mission done. They inspire us to do our very best at all times. They are the common bond among all comrades in arms,

and they are the glue that unifies the Force and ties us to the great warriors and public servants of the past."[1] It goes on to state the USAF Core Values:

1. Integrity First
2. Service Before Self
3. Excellence in all we do

It is the third core value that this study focuses on. Throughout its lifespan, the Air Force has measured excellence through rigorous evaluation systems. In fact, "Excellent" is an actual rating that individuals and units can earn in a successful evaluation. This evaluation-focused mindset *anchors* the core value of Excellence in All We Do. But what happens when excellence in fitness is only directly related to excellence in job performance? In other words, the physical requirements for Airmen to accomplish warfighting tasks may change based on technological innovations, yet the evaluation mindset keeps the fitness program chained to traditional and *one size fits all* measurement processes. As will be discussed later, this leads to cultural inconsistencies, making the creation of an ingrained fitness culture difficult.

The Air Force says it values fitness. Former CSAF John Jumper once said, "Passing the annual fitness test is not the Air Force fitness goal," adding that Airmen must constantly hone their physical abilities "to withstand and overcome the demanding rigors of deployment and combat."[2] On 17 October 2003, when he launched the Fit to Fight program, he stated, "I want to make very clear that my focus is not on passing a fitness test once a year. More important, we are changing the

[1] United States Air Force. Our Values. (2014): http://www.airforce.com/learn-about/our-values/
[2] Ronald J. Dougherty, *Fit to Fight: Admin or Ethos? Embedding Fitness in Air Force Culture.* 1.

culture of the Air Force. This is about our preparedness to deploy and fight. It's about warriors. It is about instilling an expectation that makes fitness a daily standard – an essential part of your service."[3] More recently in AFI-36-2905, 2013, current Air Force Chief of Staff General Mark Welsh states, "Commander-driven physical fitness training is the backbone of the Air Force Fitness Program and an integral part of mission requirements."[4] Furthermore, both these leaders, and many others have, to use Schein's language, culturally embedded these exhortations with resources, mentoring, and criteria.

Guidance in the form of regulations, rules, and instructions also reveal espoused beliefs regarding fitness. Air Force Instruction (AFI) 36-2905, published on 21 October 2013, outlines Air Force Chief of Staff General Welsh's intent for the current physical fitness program. It states, "It is every Airman's responsibility to maintain the standard set forth in this AFI 365 days of the year. Being physically fit allows you to properly support the Air Force mission. Commanders and supervisors must incorporate Fitness into the Air Force culture establishing an environment for members to maintain physical fitness and health to meet expeditionary mission requirements. The fitness assessment provides commanders with a tool to assist in the determination of overall fitness of their military personnel. Commander driven physical fitness training is the backbone of the Air Force fitness program and an integral part of mission requirements."[5]

This is strong language. But these initiatives, although very positive in many aspects, remain "one size fits all" programs. The

[3] Ronald J. Dougherty, *Fit to Fight: Admin or Ethos? Embedding Fitness in Air Force Culture.* 1.
[4] "United States Air Force Personnel Center DPS." *Air Force Instruction 36-2905: Fitness Program.* (Department of the Air Force, October 29, 2013),7.
[5] Department of the Secretary of the Air Force. *Air Force Instruction 36-2905: Fitness Program.* 7.

guidance is vague, demands a lot from commanders, and conflates the physical requirements to accomplish warfighting missions with the broader role fitness plays in workplace productivity. The directive instructs leaders to create a fitness culture in their units. Within the Air Force there are many different sub-cultures: maintenance, aviation, support services, cyber, space, and special operations. These sub-cultures possess their own perceptions on fitness, how it should affect its war fighters, and who they should recruit. Fitness looks different across the USAF spectrum and commanders need to possess the freedom to tailor the fitness expectation to their specific sub-culture. This is all the more important when the service as a whole persists in sending mixed messages with its espoused beliefs emphasizing personal fitness alongside its demonstrated commitment to the machinery of war. As Dougherty argued, "For beliefs and values to transform into assumptions, they must be tested, they must work, and most important, the organization's members must perceive them as contributing to their success. The analysis thus far suggests that fitness has not been embedded in Air Force culture."[6]

Artifacts

Very few US Air Force advertising campaigns have focused on individual service members. Rather, they focus on the technology that drives the USAF mission. The Air Force has purposely cultivated a culture that appeals to the technological-minded individual rather than the rifle-wielding warrior. This is important to recognize, because over time, while the adopted Army Air Corps fitness standards have remained relatively constant, the evolution of USAF technology has changed the

[6] Ronald J. Dougherty, *Fit to Fight: Admin or Ethos? Embedding Fitness in Air Force Culture.* 28.

physical requirements necessary for Airmen to fight and win wars. This evolution has led to a pronounced and growing divergence between what is *measured* and what is *required*. It is safe to say that the requirements for a cyber-operator or satellite controller are different from a combat controller or para-rescue Airmen. And as technology advances, requirements continue to change. For example, consider the physical requirements of a World War II bomber pilot, and a Remotely Piloted Aircraft (RPA) operator today. The World War II pilot had to deploy, possibly evade, and battle the physiological effects of flying. Today's RPA pilot still has some of the mental and physical stamina challenges of flying, but does so within a climate-controlled room with less physiological stress. This is not to diminish the importance of the RPA. The men and women who pilot these vehicles make an amazing and growing contribution to the warfighting effort. But it must also be recognized that the physical demands of these pilots are fundamentally different.

From the time it gained its independence as a separate armed service the USAF has, as Carl Builder makes clear in *The Masks of War*, defined its identity through its primary technological artifacts: its aircraft, machinery, and technological innovations. In addition, those *outside* the Air Force identify Airmen and their organization with these same artifacts. This is still apparent today in USAF recruiting commercials that focus on space-based satellite and computer systems, and new jets such as the F-35. It is extremely rare to see the central focus placed on the Airmen who run the systems. Recently, the Chief of Staff of the USAF, General Mark Welsh, has begun to shift this focus, but the next generation of senior leaders will need to foster a longer-term rebalance of priorities if the foundation of our culture is truly going to change. In other words, while senior leaders might desire a culture of Air Force fitness, the effort required may take a much longer process.

However, the challenges of responding to evolving physical warfighting standards may be more urgent, and if so, require more short-term attention.

It is evident the main artifact the USAF originally identified with was the airplane. This artifact is what set the service apart from all others and was the foundation for its argument to become an independent service. In actuality, airplanes led the USAF to foster a somewhat individualistic culture rather than one that is team oriented. Historically, the heroic focus has been upon the fighter pilot and his jet, or the astronaut and his rocket. During the Cold War, nuclear missiles and bombers came to center stage. Seemingly, the organization has focused primarily on technology first, followed by the individual Airman. We are recently starting to see a shift in this focus, but in today's Air Force technological artifacts remain at the forefront of its organizational culture and identity.

One would be hard-pressed to include fitness on a list of prominent and visible Air Force artifacts. In fact, only the term *Fit to Fight* seems to have gained any traction in Air Force jargon. Unfortunately, there is a perception, at least informally, that *Fit to Fight* has become a catch phrase among Airmen and a punch line across the sister services rather than one that defines an Air Force fitness culture.

Inconsistencies

How then are the espoused beliefs inconsistent with the artifacts? For the most basic example, one need only listen to the standard briefing that physiologists give every aviation student in the Air Force training pipeline. Every student destined for any kind of manned aviation career receives a briefing on the physiological effects of flying. The specific topic

of the briefing is gravitational force (*G-Force*) tolerance. The physiologist tells them that short, stocky aviators with high blood pressure are actually far more naturally built to excel in a high G-Force environment than their tall, lanky, and cardiovascular fit marathon-runner colleagues.[7] This example shows that at least in a particular subculture, the espoused beliefs, translated here in *Excellence* on a physical fitness test, is inconsistent with both its primary artifact—the airplane—and even with another espoused belief—*Excellence* in job performance.

Physical requirements for Airmen, at least in a warfighting sense, seem to evolve with advanced technology. One might even say that as technology progresses, there is a greater difference in physical requirements among separate AFSCs. For example, an F-22, because of its thrust vectoring engines, presents physiological challenges for its pilots that *none* of their predecessors have ever faced. In other words, while the discrepancies between *requirements* continue to evolve in separate operational sectors, physical fitness standards remain constant across the service.

What does this mean for the development of a fitness culture? As stated earlier, many Airmen identify fitness through the institution's standardized periodic testing, particularly since the Air Force uses the results of that test in promotion boards, awards packages, and job considerations, all of which are culture embedding mechanisms in Schein's model. AFI36-2905, published in October 2013 states, "Failing to remain current, as well as failing to attain a passing score on the applicable fitness test before the end of any performance report reporting period, will result in a "DOES NOT MEET STANDARDS" rating on the member's OPR/EPR if, as of the closeout date of any performance report,

[7] The genesis of this comment comes from informal discussions with fellow aviators throughout an Air Force flying career, and is in no way indicative of a formal service-wide survey.

currency or a passing score is not obtained. Monitor any personal FA exemptions, schedule any necessary medical examinations, and initiate FA test arrangements in a timely manner."[8] However, if that test fails to measure what a particular Airman *needs* to fulfill his or her duty requirements, then it is difficult for Airmen to take *ownership* of that test, or of the concept behind it, as long as the Air Force persists in linking fitness directly to warfighting functions that *not* all Airmen share. It might take a tailored fitness program (and assessment) to inspire lifestyle patterns necessary for the implementation of a service-wide fitness culture, and a more honest articulation of the benefits of fitness as it relates to workplace productivity.

Imagine the CSAF as the Athletic Director at a civilian university. He institutes a standardized campus wide fitness test for all intercollegiate athletes at his school. It is safe to assume that the athletic standards for a football player are probably quite different from a gymnast or a golfer. How will each athlete view that test? Will he or she see that examination as inspiring them to embrace fitness? Or will they see it as something that doesn't appreciate and understand their specific sports' needs? Secondly, will they feel less valued for their particular skill set? All of this points to the *possibility* that tailoring assessments to be more in line with actual duty requirements *may* lead to more perceived ownership of the program and more pride in the institution, and therefore inspire a greater chance for an organically nurtured culture change.

In an Air Command and Staff College (ACSC) article regarding fitness culture, Denise M. Hollywood writes the USAF has cultivated an environment of *careerism* and *stove-piping*. "From its inception, AF culture has often been viewed as a counterculture to other services. Our

[8] Department of the Secretary of the Air Force. *Air Force Instruction 36-2905: Fitness Program.* 35

fitness programs have similarly followed along these counterculture philosophy lines. Both reflect a culture based on the individual versus the team with a heavy reliance on technology. It is this emphasis that has led, in part, to the AF's current cultural problems."[9] Our history has honored individual aviators and their aircraft responsible for heroic endeavors, but has this been to the detriment of our service cohesion? USAF fitness culture needs to shift from individual emphasis to a team-based (or subculture) mindset, particular to AFSCs. As Edgar Schein alluded to in Chapter 2, this shift must begin with efforts from the organization's leadership. However, these shifts take time for groups to adapt. Are there changes that the Air Force can make immediately in order to bring back an organizational mindset rather than an individual one perhaps at the AFSC level?

This may be hard to accomplish but worthy of doing. Although hard evidence is lacking, one possible manifestation of the Air Force connection to its artifacts is a challenge in recruiting. If the Air Force is demanding that its Airmen are expert operators of the world's most advanced technologies in air, space, and cyberspace, are those talents necessarily consistent with traditional physical fitness constructs? For example, if the Air Force wants to play a major role in cyber technology and warfare, then they must be able to recruit highly intelligent individuals, some of whom may not possess superior physical capabilities (or at least not up to pass standardized Air Force physical fitness requirements). In Richard Clarke's book *Cyber War: The Next Threat to National Security and What to do About It,* he quotes USAF Major General William Lord regarding the best way to recruit future cyber-warriors. "If they can't run three miles with a pack on their back, but they can shut down a SCADA system, we need to have a culture

[9] Denise M. Hollywood, *Airman First-Can Fitness Play A Part?* (Maxwell Air Force Base: Air University, 2001), 8.

where they can fit in."[10] This chapter does not suggest that Air Force leaders should abandon the quest for an Air Force fitness culture. On the contrary, the quest should continue, but with a recognition that these efforts will take a generation or more to enable and will meet with more success by connecting fitness less to warfighting missions and more to workplace productivity where every Airman is more likely to see ownership in the program.

Moreover, current and future technology advancements place more Airmen further away from an actual combat Area of Responsibility (AOR). Today, the Air Force can effectively strike targets (kinetically and non-kinetically) around the globe from remotely piloted aircraft controlled within the United States. Cyber and Space Airmen can peer into the heart of a potentially adversarial country without ever leaving the confines of their home base. Different USAF career fields are experiencing different combat demands; therefore, the Air Force should consider modifying current physical fitness standards to meet these continually evolving requirements.

Ultimately, when the Air Force holds its visible artifacts such as aircraft, satellites, and cyber networks and identifies its obligation to national defense and its particular service contribution *through* these artifacts, inconsistencies can lead to challenges, particularly when the goal is the development of a fitness lifestyle among its Airmen. In this case, the espoused beliefs of the organization are inconsistent with its primary artifacts. Thus, while Airmen and the Air Force still self-identify through their relationship with technology and advanced machinery, the espoused push for fitness excellence and a fitness culture remain elusive.

[10] Richard A. Clarke and Robert K. Knake, *Cyber War: The Next Threat to National Security and What to Do About It.* (New York: Harper Collins Publishers, 2010), 34

Importance of Fitness

Despite these challenges, this thesis argues a fitness culture is desirable to increase the workplace productivity of its Airmen, and that Air Force senior leaders should continue to strive to cultivate one with this rationale. As stated in Chapter 3, not doing so would lead to exacerbated costs from absenteeism (as in the USAF Space Command example), and medical costs. "Excess weight and obesity cost the DoD $1.1B in direct health care costs and $167M in lost productivity each year. Current statistics reveal that 62% of DoD personnel are overweight, a percentage that has been increasing since 1995.[11] The most recent data from 2010 shows 48% of active-duty AF men and 31% of active-duty AF women as being overweight (with a BMI>25).[12] Obesity rates (BMI>30) hover around 14% for men and 8% for women in the AF."[13] Figure 5 below illustrates this growing problem.[14] Without question, obesity can lead to several debilitating ailments. These "chronic and preventable diseases… create high draws on the health care system."[15] In addition, several studies including ones sponsored by the National Institutes of Health have shown that "exercise improves mental

[11] Bray, et al., *2008 Department of Defense Survey of Health Related Behaviors Among Active Duty Military Personnel,* ES-11. Found in Jannell C. Macaulay, *The Life-Cycle Cost of Life-Style: Strategic Implications of Health in the Air Force*, (Maxwell Air Force Base: Air University, 2012), 36-37.

[12] Air Force Medical Operations Agency, *Air Force Healthy Airman Report: 2010*, 11. Found in Jannell C. Macaulay, *The Life-Cycle Cost of Life-Style: Strategic Implications of Health in the Air Force*, 36-7.

[13] Jannell C. Macaulay, *The Life-Cycle Cost of Life-Style: Strategic Implications of Health in the Air Force*, 37.

[14] Wong, Venessa. "The U.S. Military's New Mission: Slimmer Kids." (*Bloomberg Businessweek.* May 23, 2014), http://www.businessweek.com/articles/2014-

[15] Jannell C. Macaulay, *The Life-Cycle Cost of Life-Style: Strategic Implications of Health in the Air Force*, 37.

health by reducing anxiety, depression, and negative mood and by improving self-esteem and cognitive function."[16]

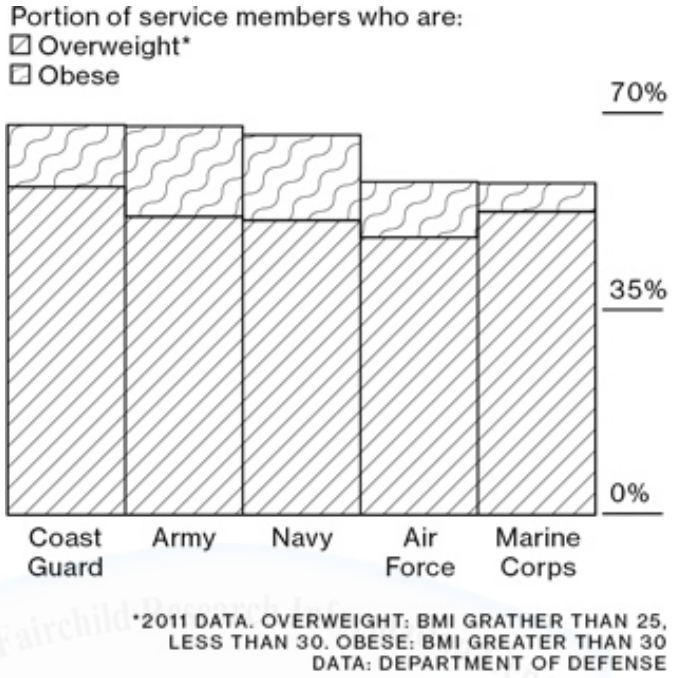

Figure 5: Service Specific Obesity Rates

Source: Wong, Venessa. "The U.S. Military's New Mission: Slimmer Kids." (*Bloomberg Businessweek*. May 23, 2014), http://www.businessweek.com/articles/2014-05-23/the-u-dot-s-dot-military-says-childhood-obesity-is-hurting-enlistment (accessed May 25, 2014). Data provided by the Department of Defense

Why is mental acuity particularly important to organizations such a s the U.S. Air Force? In Chapter 3, airpower pioneers such as Billy Mitchell called for *airminded* professionals to lead an independent service. For an institution that values the artifacts of technology and advanced machinery, quick reaction and forward thinking are absolutely critical to mission success. An article from the American Psychological

[16] Callaghan, P. "Exercise: a neglected intervention in mental health care?" (*Journal of Psychiatric and Mental Health Nursing*, 2004), 482

Association reports “researchers have also explored exercise as a tool for treating — and perhaps preventing — anxiety. When we're spooked or threatened, our nervous systems jump into action, setting off a cascade of reactions such as sweating, dizziness, and a racing heart. People with heightened sensitivity to anxiety respond to those sensations with fear.”[17] As members of the profession of arms, anxiety *must* be countered with all means necessary, even for those not on the front-lines of the battlespace.

In addition, the Air Force needs innovative thinkers, not just to operate the advanced systems they use today, but to envision the fight of tomorrow and plan for those eventualities. Dr. John J. Ratey, a Harvard psychiatrist, noted that “MRI scans of the brains of sedentary people who suddenly improve their fitness show increased volume in the hippocampus and frontal and temporal lobes, regions of the brain associated with cognitive functioning. The hippocampus in particular is associated with memory and learning.”[18] Thus, the connection between physical and mental fitness is becoming more and more apparent, meaning that the Air Force can still benefit greatly from a cultivated fitness lifestyle and should continue that quest.

With basic pragmatic issues such as skyrocketing medical costs and absenteeism, and more altruistic issues such as the health and welfare of its Airmen, it makes sense for the Air Force to continue to strive for a fitness culture. This thesis has shown, however, that cultural inconsistencies make that development extremely difficult. The next and final chapter will present both a short-term and a long-term recommendation for addressing the most pressing needs for its physical

[17] Weir, Kristen. "The Exercise Effect." *American Psychological Association*, (2011), 48.
[18] Bernstein, Lenny. "A Growing Body of Evidence Links Exercise and Mental Acuity." *The Washington Post*. (May 25, 2010). http://www.washingtonpost.com/wp-dyn/content/article/2010/05/24/AR2010052402608.html (accessed May 27, 2014).

fitness program while staying cognizant (and respectful) of dominant organizational culture characteristics.

Chapter 5

Recommendations and Conclusion

The pessimist complains about the wind; the optimist expects it to change; the realist adjusts the sails.

-William Arthur Ward

Understanding the foundations of Air Force culture is critical to shaping an effective approach to an adaptable fitness program. For years, senior leaders have attempted to create a fitness culture by connecting it to core warfighting missions even as those missions arguably require less fitness over time. Embracing technological and mechanical artifacts is a necessary cultural underpinning in the Air Force. It is doubtful that this will change any time soon (nor is it necessarily something that *should* be attempted). After all, technological advancements, along with the air-minded warfighter, defined what made the service different and justified its independence. It is rather workplace productivity that Air Force leaders should leverage to create a fitness culture that every Airman can own. Keeping this perspective in mind, the evidence previously unfolded throughout this thesis should encourage leaders to change their approach to how they attempt to foster changes in the fitness environment. Ultimately, this thesis offers both a short-term and a long-term recommendation. Both aim at respecting established cultural norms while at the same time cultivating a fitness lifestyle for every Airman in the service.

The Short-term Focus

As the reader dissects the conclusion of this thesis, a possibility for immediate action comes into focus. The United States Air Force should consider implementing an Air Force Specialty Code (AFSC)-specific

physical fitness program first in those fields where fitness is required for specific warfighting functions. Over time, these fields can act as a vanguard for the rest of the Air Force, for which fitness is more related to workplace productivity. As the following analysis shows, Department of Defense (DoD) regulations *do allow* for this flexibility in the Air Force fitness program.

DoD Directive 1308.1 is the US military's guiding document for the generation and maintenance of service-specific military fitness programs. Paragraph 4.1.7 states, "All Service members shall be formally evaluated, and tested for the record at least annually. Corrective action for failure to meet required standards must be initiated. Due to limited training hours, mandatory physical training during duty hours is not required. The Services shall establish a program to test physical fitness of their personnel during scheduled training. Reserve component commanders and supervisors shall encourage physical fitness programs during non-duty hours to the greatest extent possible. As in the Active components, an annual physical fitness training report is required for Reserve components."[1] This DoD policy leaves room for individual Services to take its liberty in creating a fitness environment that maintains the required means of evaluation and promotes a cultural change. Paragraph 4.1.1 states, "The Military Services shall design physical fitness training and related physical activities consistent with established scientific principles of physical conditioning that enhance fitness and general health essential to combat readiness. Individual Service members must possess the cardio-respiratory endurance, muscular strength and muscular endurance, together with desirable levels of body composition to successfully perform in accordance with their Service-

[1] Department of Defense. "DODD Number 1308.1." *DoD Physical Fitness and Body Fat Program.* (United States Depatment of Defense, June 30, 2004), 2.

specific mission *and military specialty* (emphasis added)."[2] The last portion of this paragraph provides a possible way ahead for the USAF.

AFI 36-2905 outlines the responsibilities for USAF senior leaders in regards to the development and maintenance of the physical fitness program.

> **2.1. US Air Force Chief of Staff (CSAF).** Directs implementation of the Air Force Fitness Program (FP).
>
> **2.2. US Air Force Deputy Chief of Staff for Manpower, Personnel, and Services (AF/A1).**
> 2.2.1. Develops fitness standards.
> 2.2.2. Develops personnel policy and guidance for implementation/administration of the FP.
> 2.2.3. Consults with AF/SG for medical-related issues related to fitness policy.
> 2.2.4. Coordinates with NGB/A1 and AF/REP on all fitness policy and guidance.
> 2.2.5. Ensures fitness standards at the US Air Force Academy (USAFA), Officer Training School (OTS), Commissioned Officer Training (COT) course, Reserve Officer Training Corps (ROTC), Basic Military Training (BMT), and technical training schools align with this instruction.
> 2.2.6. Directs research to further FA methods and fitness standards.
> 2.2.7. Develops body composition accession standards in coordination with AF/SG.
> 2.2.8. Provides software development to support the FP.

[2] Department of Defense. "DODD Number 1308.1." *DoD Physical Fitness and Body Fat Program.* (United States Depatment of Defense, June 30, 2004), 2.

2.2.9. Supports the FP by ensuring availability of fitness resources: facilities, equipment, and programs.
2.2.10. Ensures healthy food selections are available at in-garrison and deployed base dining facilities.

2.3. US Air Force Surgeon General (AF/SG).
2.3.1. Directs intervention and training programs related to medical aspects of the FP.
2.3.2. Programs and resources the medical aspects required to support the FP.[3]

The directives outlined above are mostly focused on policy and assessment. As one reads the AFI, the very first mention of a "healthy lifestyle" is not until major command (MAJCOM) level guidance is given. This guidance gives Wing Commanders this specific responsibility.

2.12. Installation Commander, ANG WG/CC, or Equivalent.
2.12.1. Executes and enforces the FP and ensures compliance with appropriate administrative action in cases of non-compliance.
2.12.1.1. Ensures equitable administration of FA throughout the installation.
2.12.2. Provides an environment that supports and motivates a healthy lifestyle through optimal fitness and nutrition IAW AFI 40-104, *Health Promotion Nutrition*.[4]

[3] Department of the Secretary of the Air Force. *Air Force Instruction 36-2905: Fitness Program.* 8.
[4] Department of the Secretary of the Air Force. *Air Force Instruction 36-2905: Fitness Program.* 10.

AFI 40-104, Health Promotion Nutrition, is a nutritional guidance manual for Wing Commanders to provide proper nutrition standards for their base dining facilities. AFI 40-101 directs the overall Health Promotion Program (HPP) in conjunction with AFI 36-2905. According to the document, "Health Promotion (HP) is the science and art of helping people change lifestyle behaviors to move toward a balance of physical, emotional, intellectual, social, and spiritual health. To facilitate changes, health promotion incorporates a combination of social change strategies, namely: leadership, technology, economic, political/legal, education, social marketing."[5] The stated purpose starts off promising, but as one reads further it becomes apparent that this program is once again focused on evaluation and policy rather than a genuine attempt to create a health-conscious mindset.

AFI-40-101 paragraph 2.2 states, "HPPs include, as a minimum, the following awareness, education, and intervention core programs: a Health Evaluation Assessment Review (HEAR) in conjunction with the Preventive Health Assessment (PHA) to address both wellness perceptions and health risks; early intervention for increasing personal performance and minimizing health risks; cycle ergometry fitness assessment and exercise prescriptions; fitness enhancement and conditioning; tobacco cessation, prevention and deglamorization; drug and alcohol abuse awareness and prevention; general nutrition for all ages; injury and disease risk education; and stress management and prevention."[6]

AFI 36-2905 highlights three other documents that work in conjunction with, or in support of, it: AFPD 10-2: Readiness, AFI 34-266:

[5] Air Force Medical Operations Agency. "Air Force Instruction 40-101." *Health Promotion Program.* (United States Air Force, May 9, 1998), 1.
[6] Air Force Medical Operations Agency. "Air Force Instruction 40-101." *Health Promotion Program,* 2.

Air Force Fitness and Sports Programs, and DoD 1308.1: DoD Physical Fitness and Body Fat Program. Paragraph 4 of AFPD 10-2 states, "The AF will effectively manage its resources by providing for the training, morale, health and fitness of its personnel and will provide the equipment, supplies, and infrastructure required to execute all tasks related to the AF mission."[7] Finally, AFPD 10-248 states that all Airmen will follow the directives of the USAF Fitness AFI.[8] All of the above documents are directive in nature, outlining how to structure the fitness *program* for Airmen but do nothing to address evolving physical requirements or implement cultural change.

With the exception of the DoD documents, which are authoritative relative to service AFIs, all of the above-listed guidance regulations would need to change to reflect an AFSC-specific standards program. This thesis will not provide a roadmap for how to implement the specific AFI changes, but without question, they must be mindful of the diverse career backgrounds of its Airmen. The Chief of Staff should empower the Air Force Surgeon General to nominate an individual with a background in Health and Human Performance to manage these changes. The Air Force's head of Health and Human Performance would work directly with a DoD-initiated Human Performance Resource Center (HPRC). "HPRC is aligned under Force Health Protection and Readiness and is the educational arm of the Consortium for Health and Military Performance at the Uniformed Services University of the Health Sciences."[9] Along with the HPRC, the Cooper Institute and the National Strength and Conditioning Association (NSCA) have researched military fitness and have developed overall lifestyle programs to support today's

[7] Headquarters United States Air Force. "Air Force Directive Policy 10-2." *Readiness.* (Washington D.C.: Headquarters United States Air Force, November 6, 2012), 2.
[8] Headquarters United States Air Force. "Air Force Instructioin 10-248." *Fitness Program.* (Headquarters United States Air Force, September 25, 2006), 1.
[9] Human Performance Resource Center . *About HPRC.* (2014): http://hprc-online.org/about-us/about-hprc#about-us

war fighter. Changing the program may make some leaders nervous, especially during fiscally constrained times. However, the USAF would not need to change any of its installation programs or facilities, but rather adjust its articulation of fitness to stress workplace productivity so all can own the program. This change will only support the goals of every Airman to continue maintaining excellence in all they do.

Nearly all college or university sports programs have specific fitness programs for their respective athletic teams. Golfers and gymnasts do not train like hockey and football players. In fact, on a football team, offensive linemen do not train like wide receivers. Why do we expect the same of our Airmen? Changing the USAF fitness culture will take time and is worth pursuing; however, something needs to be done now that will positively affect the USAF's workplace productivity while it holds firm to its technology-based artifacts.

One concern that USAF leaders may have if an AFSC specific PFT takes form is that divisions (or even animosity) may be created between career fields. But this is an overblown concern. Using collegiate athletics as a model, many athletes who play individualized sports share a common bond identifying themselves under one university name. As one collegiate strength and conditioning coach and member of the National Strength and Conditioning Association says,

> In my experience working with collegiate athletes, I observed camaraderie between the athletic teams. The teams held each other in high regard and had respect for each other as elite athletes and fellow representatives of the school athletic program. The team leadership's attitude towards other players and coaches within the school was reflected in their programs. The coaches had great impact on their teams' worldview of unity amongst the athletic department, school pride and the common goal of representing the university. I did not experience any resentment, hostility or resistance

> between the teams due to the differences of expectations, training methodology and performances of the differing sports. Each team understood and appreciated the importance of a unique and sport-specific set of standards in their coaching and training to achieve their highest level of success.[10]

Naturally, friendly rivalries may form between career fields, but a common pride within the United States Air Force will become solidified as Airmen take more ownership and security in their specialized career fields and individual identities.

Currently, Air Force Special Operations Command is the only MAJCOM with an individualized fitness assessment. The USAF needs to use this example as a springboard to an AFSC-specific physical fitness assessment. This may help individual Airmen to take more personal responsibility within their career field. Those Airmen who spend most of their days behind a computer system or monitoring highly technical equipment do not necessarily need to possess the physical capability of a combat controller or Para-rescue Jumper. This is not to say that all Airmen should forget that they are United States military professionals, but simply to acknowledge that USAF career fields are composed differently and have unique physical requirements—and all Airmen share an obligation to workplace productivity.

While the AFSC-specific assessment is a recommendation for the short-term, it may have long-term effects. The goal of this initiative is to create synergy between specific career path physical *requirements* and the *standards* used to measure fitness performance. If Airmen see these fitness standards more as a genuine measure of specific requirements, it may spark a sense of ownership in the program itself. Such involvement

[10] Stamps, Bethany L, interview by David I Stamps. *NSCA-CPT* (April 23, 2014).

may help to foster an organic cultivation of a fitness lifestyle in the Air Force.

The Long Ball

As Chapter 4 argued, Air Force senior leaders should not give up on the goal of a service-wide fitness culture. Roshetko writes, "The Air Force should pat itself on the back for taking a giant step forward, but then immediately set a course on continued advancement. Specifically, the Air Force must direct efforts toward building an Air Force fitness culture that emphasizes robust, comprehensive fitness lifestyles, rather than a fitness program that focuses on annual fitness testing and administrative details."[11]

The word *culture* in this sense equates to the cultivation of *lifestyle norms.* If the United States Air Force is truly determined to change its fitness culture, then physical fitness needs to become a part of the normal duty day for all Air Force personnel. Creation of an embraced Air Force fitness culture will likely take a generation or longer. As the organization adapts to changes, new habits found among its employees will soon follow. Ultimately, the culture the USAF is striving to possess is one in which the Airman can concentrate on building the skills and education to maximize its warfighting capability in some career fields and workplace productivity across the entire force. In this way, fitness can become a part of an everyday lifestyle, not a forced administrative order.[12]

As General Jumper's Fit-to-Fight program attempted years ago, senior leaders should look for ways to inspire fitness *outside* of its periodic assessment program. USAF senior leaders may be the only

[11] Thomas F. Roshetko, Air Force Fitness Culture: Are We There Yet? 2.
[12] Ronald J. Dougherty, *Fit to Fight: Admin or Ethos? Embedding Fitness in Air Force Culture.* 51.

individuals who possess the hierarchical position to influence Airmen on an institution-wide scale. It will take effort, and its effects will take place over time, but the task is manageable as long as leaders understand and respect the institution's deeper cultural influences. Schein cautions us about the challenges of such an effort: "Culture change, in the sense of changing basic assumptions is, therefore, difficult, time-consuming, and highly anxiety-provoking--a point that is especially relevant for the leader who sets out to change the culture of the organization. The most central issue for leaders, therefore, is how to get at the deeper levels of a culture, how to assess the functionality of the assumptions made at that level, and how to deal with the anxiety that is unleashed when those levels are challenged."[13] Before leaders can create a true USAF fitness culture, leaders must recognize where the *service's* overall culture currently stands. Once this has happened, leaders can focus on what types of changes need to take place immediately and which changes will need to take place over a much longer timeframe.

It is clear that USAF senior leaders have tried for decades through espoused beliefs to create a fitness culture within the organization. They have also attempted and are still trying to make changes to the negative perceptions that the USAF fitness program has been associated with over the years. Standards of zero tolerance and strict adherence to policy have become the Air Force norm in attempts to make Airmen view their service more seriously. But senior leaders may want to shift their long term focus away from assessments and rigid, service-wide standards. According to the Air Force fitness program website, the USAF fitness program goal is to motivate Airmen to participate in a year-round physical conditioning program that emphasizes total fitness, to include proper aerobic conditioning, strength and flexibility training, and healthy eating. Health benefits from an active lifestyle will increase productivity,

[13] Edgar H. Schein, *Organizational Culture and Leadership.3rd Edition.* 36-37.

optimize health, and decreased absenteeism while maintaining a higher level of readiness.[14]

Conclusion

The author recently witnessed a number of Airmen with plastic wrap cinched around their bellies while sitting in a sauna prior to the administration of a PFT. When asked for an explanation, the Airmen fully admitted that they were taking drastic measures solely for the purpose of passing the waist measurement portion of the PFT. They also admitted that they only train to be able to do push-ups, sit-ups, and a 1.5-mile run. These are the behaviors about the Air Force physical fitness program encourages, despite efforts for decades by senior leaders to cultivate a fitness lifestyle in the institution.

Over the past several years, scholars have written many articles and essays regarding an Air Force fitness culture, or lack thereof. This thesis has attempted to approach the issue from a unique perspective, calling out that inconsistency between the Air Force's espoused beliefs and its embrace of technological artifacts actually *hinder* the establishment of a fitness culture.

This thesis proposes an AFSC-specific assessment program in the short-term (albeit with long-term implications) and the continuation of a long-term focus on implementing senior leader-directed changes outside of assessment to foster a lifestyle culture in the Air Force. Both immediate and long-term efforts may actually contribute to the overall goal, thereby increasing workplace productivity and overall health of the

[14] Air Force Personnel Center. *Air Force Fitness Program*. (12 October, 2013): http://www.afpc.af.mil/affitnessprogram/index.asp

force, while tailoring specific fitness standards to the unique warfighting requirements of its Airmen's diverse categories.

This imperative will become more important over time. The Department of Defense website quotes an article entitled *Too Fat to Fight.* This article states, "Mission: Readiness, an organization of retired senior military leaders, is warning Congress that at least nine million 17- to 24-year-olds in the United States are too fat to serve in the military. That is 27 percent of all young adults."[15] The current youth generation is quite technically savvy, but also has little motivation to maintain a healthy lifestyle. Tying fitness to general matters of workplace productivity across the entire force, and allowing those AFSCs with stronger physical demands to act as fitness vanguards, may be one way to create ownership of a fitness culture, even for those youngsters who will see little direct link between warfighting missions and waist lines.

The cartoon mentioned in the introduction sends the Air Force a valuable message. The Air Force *should* stop lying to itself and admit its ambivalence toward physical fitness. Sending conflicting messages to its Airmen about the warfighting benefits of physical fitness potentially creates detachment rather than ownership of the fitness program. The service as a whole identifies more closely to workplace productivity, especially as the warfighting arena evolves. Proper messaging, coupled with tailored fitness standards, may be just the jumpstart that the Air Force fitness program needs to prepare Airmen for the unique challenges ahead.

[15] Mission: Readiness. *Too Fat to Fight.* (Washington D.C.: Mission: Readiness, 2012),1.

Bibliography

Air Force Medical Operations Agency. "Air Force Instruction 40-101." *Health Promotion Program.* United States Air Force, May 9, 1998.

Air Force Personnel Center. *Air Force Fitness Program.* 12 October, 2013. http://www.afpc.af.mil/affitnessprogram/index.asp (accessed February 3, 2014).

Alexander, Michael W. "A Physically Fit Airman: An Essential Element for Agile Combat Support in the AEF." *Air Force Journal of Logistics*, 2002: 40-42.

Bernstein, Lenny. "A Growing Body of Evidence Links Exercise and Mental Acuity." *The Washington Post.* May 25, 2010. http://www.washingtonpost.com/wp-dyn/content/article/2010/05/24/AR2010052402608.html (accessed May 27, 2014).

Builder, Carl H. *The Masks of War: American Military Styles in Strategy and Analysis.* Baltimore: The RAND Corporation, 1989.

Callaghan, P. "Exercise: a neglected intervention in mental health care?" *Journal of Psychiatric and Mental Health Nursing*, 2004: 476-483.

Carmical, Steven C. *Physical Fitness In The United States Air Force.* Student Thesis, Maxwell Air Force Base: Air University, 2006.

Centers for Disease Control and Prevention. "CDC.gov JAMA Highlights." *Centers for Disease Control and Prevention.* December 26, 2012. http://www.cdc.gov/obesity/downloads/JAMA_Highlights_FINAL_data_source_added_011013.pdf (accessed February 3, 2014).

Clarke, Richard A, and Robert K Knake. *Cyber War: The Next Threat to National Security and What to Do About It.* New York: Harper Collins Publishers, 2010.

Cooper Aerobics Health and Wellness. *Cooper Institute About.* March 2013. http://www.cooperaerobics.com/About.aspx (accessed February 3, 2014).

—. *Kenneth H. Cooper, MD, MPH.* February 2014. http://www.cooperaerobics.com/About/Our-Leaders/Kenneth-H-Cooper,-MD,-MPH.aspx (accessed February 3, 2014).

Department of Defense. "DODD Number 1308.1." *DoD Physical Fitness and Body Fat Program.* United States Depatment of Defense, June 30, 2004.

Department of the Secretary of the Air Force. *Air Force Instruction 36-2905: Fitness Program.* Washington DC: Air Force Personnel Center, 2013.

Dougherty, Ronald J. *Fit To Fight: Admin Or Ethos? Embedding Fitness In Air Force Culture.* Student Thesis, Maxwell Air Force Base: Air University, 2009.

Gildea, Debbie. "Air Force Personnel Center." *AF tests 24/7 fitness centers.* December 18, 2012. http://www.afpc.af.mil/news/story.asp?id=123330360 (accessed February 5, 2014).

Gindhart, Richard T. *The Air Force Physical Fitness Program. Is It Adequate?* Student Thesis, Maxwell Air Force Base: Air University, 1999.

Headquarters United States Air Force. "Air Force Directive Policy 10-2." *Readiness.* Washington D.C.: Headquarters United States Air Force, November 6, 2012.

—. "Air Force Instructioin 10-248." *Fitness Program.* Headquarters United States Air Force, September 25, 2006.

Hollywood, Denise M. *Airman First-Can Fitness Play A Part?* Student Thesis, Maxwell Air Force Base: Air University, 2001.

Human Performance Resource Center . *About HPRC.* 2014. http://hprc-online.org/about-us/about-hprc#about-us (accessed February 15, 2014).

Jannell, Macaulay C. *The Life-Cycle Cost of Life-Style: Strategic Implications of Health in the Air Force.* Student Thesis, Maxwell Air Force Base: Air University, 2012.

Mission: Readiness. *Too Fat to Fight.* Professional Research Report, Washington D.C.: Mission: Readiness, 2012.

Mitchell, William. *Winged Defense: The Development and Possibilities of Modern Air Power-Economic and Military.* Tuscaloosa: University of Alabama Press, 2009.

Nelson, Heather A. *The Role Of Squadron Commanders In Improving Physical Fitness Behaviors.* Student Thesis, Maxwell Air Force Base: Air University, 2008.

Roshetko, Thomas F. *Air Force Fitness Culture: Are We There YET?* Student Thesis, Maxwell Air Force Base: Air University, 2008.

Rumelt, Richard P. *Good Strategy Bad Strategy: The Difference and Why It Matters.* New York: Crown Business, 2011.

Schein, Edgar H. *Organizational Culture and Leadership, 3rd Edition.* San Francisco: Jossey-Bass, 2004.

—. *Organizational Culture and Leadership. 4th Edition.* San Francisco: Jossey-Bass, 2010.

Sharma, Ashish, Vishal Maddan, and Fredrick Petty. "PMC: US National Library of Medicine National Institutes of Health." *Exercise for Mental Health.* August 2, 2006. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1470658/ (accessed May 22, 2014).

Stamps, Bethany L, interview by David I Stamps. *NSCA-CPT* (April 23, 2014).

United States Air Force. *Our Values.* 2014. http://www.airforce.com/learn-about/our-values/ (accessed February 5, 2014).

"United States Air Force Personnel Center DPS." *Air Force Instruction 36-2905: Fitness Program.* Department of the Air Force, October 29, 2013.

Vanderburgh, Paul M. "Body Mass Penalties in the Physical Fitness Tests of the Army, Air Force, and Navy." *Military Medicine*, 2006: 753-757.

Verdonk, Petra, Hannes Seesing, and Angelique de Rijk. "Doing masculinity, not doing health? a qualitative study among dutch male employees about health beliefs and workplace physical activity." *BMC Public Health*, 2010: 1-14.

Vermillion, Lynne E. *Understanding The Air Force Culture.* Student Thesis, Maxwell Air Force Base: Air University, 1996.

Weir, Kristen. "The Exercise Effect." *American Psychological Association*, 2011: 48.

Williamson, W M, and E J Ham Ley. "Fitness And Health Measurement In Aircrew." *Britsh Journal of Sports Medical*, 1984: 110-115.

Wong, Venessa. "The U.S. Military's New Mission: Slimmer Kids." *Bloomberg Businessweek.* May 23, 2014. http://www.businessweek.com/articles/2014-05-23/the-u-dot-s-dot-military-says-childhood-obesity-is-hurting-enlistment (accessed May 25, 2014).

Worden, Thomas, and Edward D White. "Modifying the U.S. Air Force Fitness Test to Reflect Physical Combat Fitness: One Study's Perspective." *Military Medicine*, 2012: 1090-1095.

Yolitz, Brian D. *Organizational Change: Is The United States Air Force Doing It Right?* Student Thesis, Maxwell Air Force Base: Air University, 1997.