

AU/ACSC/97-0607E

ORGANIZATIONAL CHANGE: IS THE UNITED STATES AIR
FORCE DOING IT RIGHT?

A Research Paper

Presented To

The Research Department

Air Command and Staff College

In Partial Fulfillment of the Graduation Requirements of ACSC

by

Major Brian D. Yolitz

March 1997

Report Documentation Page

Report Date 01MAR1997	Report Type N/A	Dates Covered (from... to) -
Title and Subtitle Organizational Change: Is the United States Air Force Doing it Right?	Contract Number	
	Grant Number	
	Program Element Number	
Author(s) Yolitz, Brian D.	Project Number	
	Task Number	
	Work Unit Number	
Performing Organization Name(s) and Address(es) Air Command and Staff College Maxwell AFB, AL 36112	Performing Organization Report Number	
Sponsoring/Monitoring Agency Name(s) and Address(es)	Sponsor/Monitor's Acronym(s)	
	Sponsor/Monitor's Report Number(s)	
Distribution/Availability Statement Approved for public release, distribution unlimited		
Supplementary Notes		
Abstract		
Subject Terms		
Report Classification unclassified	Classification of this page unclassified	
Classification of Abstract unclassified	Limitation of Abstract UU	
Number of Pages 42		

Disclaimer

The views expressed in this academic research paper are those of the author(s) and do not reflect the official policy or position of the US government or the Department of Defense.

Contents

	<i>Page</i>
DISCLAIMER	ii
LIST OF ILLUSTRATIONS	v
PREFACE	vi
ABSTRACT	vii
INTRODUCTION	1
ORGANIZATIONS	3
Organizational Culture	3
Levels of Culture	4
Artifacts	4
Values and Beliefs	5
Basic Assumptions	5
Organizational Culture Model	6
Creating or Embedding Culture	7
Organizational Cultural Analysis	8
Organizational Frameworks	9
ORGANIZATIONAL CHANGE CONCEPTS	12
Unfreezing, Restructuring, and Refreezing	12
Using Frames in Change	13
Change Equals Effort Over Time Model	14
THE QUALITY AIR FORCE	18
Roots of the Quality Air Force—Top Level	18
Major Command, Base, and Unit Level	20
Analysis	21
CONCLUSIONS	26
Recommendations for Future Study	28
APPENDIX A: CULTURAL CHANGE MECHANISMS	30
APPENDIX B: CULTURAL EMBEDDING MECHANISMS	31

BIBLIOGRAPHY 34

Illustrations

	<i>Page</i>
Figure 1. Organizational Culture	6
Figure 2. Culture-Embedding Mechanisms	8
Figure 3. Change equals Effort over Time Model	15

Preface

We are the leaders of tomorrow's Air Force. In the future, our Service will face changes as the result of many forces including new technologies, privatization, and downsizing. As professional military officers, we are expected to be experts in our career field, but we must also be skilled leaders. Of the many skills we will need in leading tomorrow's Air Force, understanding and implementing effective and lasting organizational change will be one of the most critical. This research project attempts to provide some insight into understanding organizations and shed light on what it takes to successfully guide the change process. While not meant to be an exhaustive resource, this project should give the reader several points to consider before they set out on the change journey and say "just do it."

To say I learned a great deal during the research process and in preparing this paper is an understatement. I owe special thanks to Major Scott Morgan. He is one of the pioneers at Air Command and Staff College who took a chance and led Organizational Culture and Leadership, one of the new research electives, during AY97. The elective program brought together a dozen officers for a focused study in specific areas of common interest. I believe the program was effective and should be continued.

Annie, Dave, and Jason, without your patience, love, and support, none of this would be possible, thank you.

Abstract

While the future holds many unknowns, all can agree the future will be one of vast and dynamic change. Change will come as the result of new technology, regulations or directives, and resource restrictions. What can Air Force leaders do to prepare for and successfully implement effective and lasting organizational change? A review of organizational theory research shows that to change an organization, leaders must first understand how an organization operates. They need to understand an organization's culture, how that culture is created and analyzed, and how to look their organization from several perspectives or frameworks to understand its inner workings. Organizational change theories call for leaders to unfreeze, restructure, and refreeze their organization's culture. This process takes a great deal of time, effort, and consistency. These points are often underestimated and misunderstood. Implementation of Total Quality Management into the United States Air Force is a good example of this. The process began more than six years ago with much fanfare and excitement. Unfortunately, the change did not follow the processes outlined by organizational scholars and expectations for a quick change were too optimistic. As a result, the Service is still working to complete the cultural change. It will take continued leadership commitment and effort at all levels to complete the institutionalization process.

Chapter 1

Introduction

Change before you have to.

—Jack Welch
CEO General Electric

Change is about the only constant today's leaders can count on when looking into the future. Whether it is change to incorporate a new technology, achieve compliance with a new regulation or directive, meet fiscal or manpower reductions, or even a change for the sake of change, the future promises to be very dynamic and leaders must be prepared. They must map out strategies and execute plans that create effective and lasting organizational change to meet these challenges. With change being a constant, are there considerations or steps a leader should take into account to assist their organizational change strategies and plans to effect the correct parts of their organization and produce a meaningful and lasting change?

Over the past several years, the United States Air Force has seen many changes. These changes have come in many forms and from forces applied from both inside and outside the Service. Implementation of the Objective Wing organizational structure, realigning and consolidating Air Force specialty codes, and even redesign of the service dress uniform are examples of changes generated from within the Air Force. In response to outside forces such as fiscal and personnel reductions, a changing threat environment,

and new laws and regulations, the Air Force has downsized its military strength by 36% over the past ten years, closed and consolidated many bases and facilities both in the continental United States and overseas, changed its business practices to take into account environmental issues early in the procurement process, and adopted Total Quality Management (TQM) principles.¹ The effectiveness of these changes is open to debate.

Organizational change management is the focus of this project. Chapter 2 lays a foundation for understanding organizations by highlighting organizational culture, creating and analyzing culture, and the concept of organizational frameworks as defined by several of today's leading organizational and management scholars. Chapter 3 presents change theories by these same scholars and includes an organizational change model to help leaders and managers understand change. The next chapter analyzes implementation of TQM into the United States Air Force, i.e., did the introduction of TQM follow the concepts outlined by organizational and management scholars? Finally, conclusions and recommendations along with potential areas for further research are in Chapter 5.

Notes

¹Mehuron, Tamar A. "The Air Force in Facts and Figures." *Air Force Magazine* 79, no. 5 (May 1996): [40].

Chapter 2

Organizations

I've discovered that the difference between a good unit and a poor unit is fundamentally leadership.

—General Ronald R. Fogleman
Chief of Staff, United States Air Force

Leaders lead. They lead groups of people. To do so, leaders must be aware of the intricacies and inner workings of the groups they lead. The leadership process is exciting and challenging and can be very frustrating at times. Why? Because, organizations are made up of people and human behavior can be very difficult if not impossible to predict. Before we look at implementing change in a group or organization, we must first understand what makes an organization tick. This chapter introduces the concept of organizational culture, including artifacts, values, and assumptions, and frames to gain an insight and understanding of organizations.

Organizational Culture

In his book *Organizational Culture and Leadership*, Edgar H. Schein states, “Organizational learning, development, and planned change cannot be understood without considering culture as a primary source of resistance to change.”¹ What is organizational culture? According to Schein’s formal definition, organizational or group culture is:

A pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems.²

David Drennan, in his book *Transforming Company Culture*, tries to boil this formal definition of organizational culture into the simple phrase “*how things get done around here.*”³ This phrase includes the same concepts outlined in Schein’s definition. First, the group develops particular ways of handling routine functions or work by experience. Over time, the group learns what works given a set of circumstances and what does not. This way of operating becomes “acceptable” or “the standard practice” and leads to a sense of safety or comfort when facing a situation with similar conditions. Continued use of these methods lead to habits. Over time these habits, if continued to be confirmed, transform into a groups basic assumptions. The group projects these values and assumptions on new members of the group as the acceptable way to act and react.

Levels of Culture

Schein introduces the concept of levels to analyze organizational culture. “Levels refer to the degree in which the cultural phenomenon is visible to the observer” or those outside the organization.⁴ The three levels range from very observable artifacts through espoused values and beliefs to what Schein calls basic assumptions.

Artifacts

When entering an organization, the first things one encounters are its artifacts. They represent the top level or most visible aspects of organizational culture. Artifacts are those things we can see, hear, or “feel” about an organization. They include the physical

environment, language, and “air” about the group. Processes or behavior of the groups people, how they address each other and interact, and group ceremonies or rituals are also considered artifacts of an organization. Schein cautions against making any judgments about an organizations 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 organizations values.

Values and Beliefs

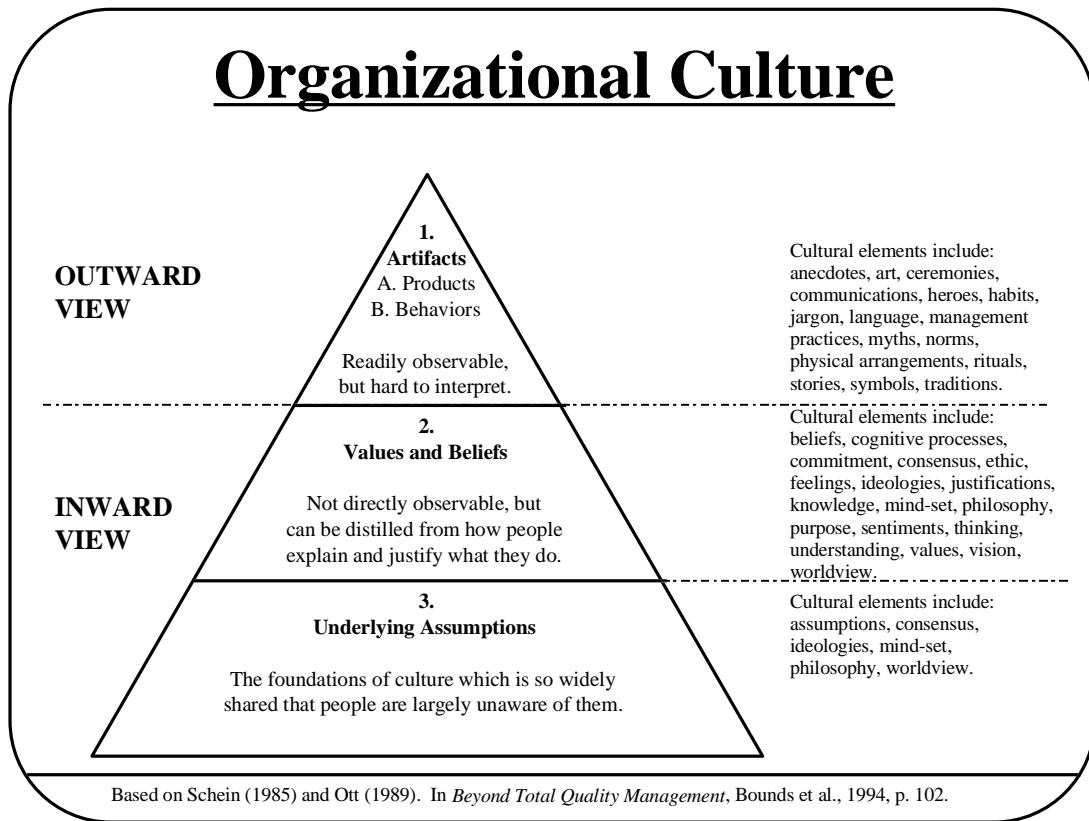
A group’s values, often referred to as espoused values, are those principles or ideas the group articulates or announces publicly as what they stand for or what they are trying to achieve.⁵ Conflict arises when an organizations espoused values are in conflict with or are not supported by the actual actions. This occurs when people say they would do given a set of circumstances as opposed to what they actually do under those same circumstances.⁶ In essence, this conflict is when one “talks the talk” but fails to “walk the walk.” An example may be if the groups stated value is “service to customer is number one” and their customers find it difficult if not impossible to reach a customer service representative over the phone due to limited hours of operation and busy lines. The talk and the walk are incongruent.

Basic Assumptions

At the deepest level of organizational culture are the groups shared assumptions. These tend to be those ideas, concepts, or beliefs the group does not question or debate, therefore they tend to be extremely difficult to change. Assumptions are the result of continually validated and reinforce values, they guide group behavior, perceptions,

thoughts, and feelings about a situation. They can deal with basic aspects of life—the correct way for the individual and group to relate to each other; relative importance of work, family, and self-development; the proper role of men and women; and the nature of the family.⁷

Organizational Culture Model



Source: Bounds, Greg, Lyle Yorks, Mel Adams, and Gispie Ranney. *Beyond Total Quality Management*. New York: McGraw-Hill Inc., 1994.

Figure 1. Organizational Culture

Based on Schein’s work, Greg Bounds, Lyle Yorks, Mel Adams, and Gispie Ranney. created an organizational culture model (Figure 1) to show the relationship between the three levels of culture. At the very top are the most visible components of organizational

culture, the artifacts. Next are the organizations values and beliefs. At the third level of the Bounds, Yorks, Adams, and Ranney model are the underlying assumptions.

The three levels of culture are dynamically interrelated; each level influences the others. This interrelationship is often overlooked by managers and may explain why managers sometimes fail to actually change culture. Many attempts to change culture focus on surface-level artifacts without changing deeper level values or assumptions. Such changes are doomed to be temporary.⁸

Creating or Embedding Culture

How is organizational culture created? Simply stated, leadership sets the tone.⁹ When an organization is established or in its infancy, the founder chooses the basic mission and sets the environment in which the group will work.¹⁰ Over time, the founder slips away from the organization and new leaders step up to carry the organization toward their vision of the future. Schein says, “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.”¹¹ What leaders pay attention to is one of six of Schein’s “primary embedding mechanisms” (Figure 2).¹² These leadership actions create the “climate” of an organization. This climate reflects the basic values and beliefs of the founder in young organizations and tends to shift to reflect the basic assumptions of the organization as it matures.

As the organization matures and stabilizes, Schein says design, structure, architecture, rituals, stories, and formal statements emerge as a second set of potential culture embedding mechanisms. He calls the items secondary articulation and reinforcement

mechanisms. They become culture imbedding mechanisms only if they are consistent the primary mechanisms. If there is inconsistency, the secondary mechanisms will be ignored or they will be the source of conflict within the organization.

Culture-Embedding Mechanisms

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

Source: Bounds, Greg, Lyle Yorks, Mel Adams, and Gispie Ranney. *Beyond Total Quality Management*. New York: McGraw-Hill Inc., 1994.

Figure 2. Culture-Embedding Mechanisms

Additional information on these primary embedding mechanisms and secondary articulation and reinforcement mechanisms can be found at Appendix B.

Organizational Cultural Analysis

With an understanding of levels of organizational culture, how does a leader or manager uncover or highlight the key cultural components that drive or impede their

organizations success? To help leaders with cultural issues, many corporations turn to “expert” consultants or gurus for assistance. This may not be necessary. Schein says a cultural analysis can be accomplished by an insider, someone within the organization.¹³

Schein utilizes a four step process for organizations to decipher their basic cultural assumptions¹⁴. First, and most important, is gaining leadership commitment by defining why the analysis is required and what they want to accomplish with the process.¹⁵ Next is a large group meeting of key staff people. This meeting is the typical “off-site” many are familiar with where the group leaves the standard workplace to focus specifically on the analysis process. During the meeting, the facilitator outlines the analysis process and leads the group through questions and discussion to uncover the groups artifacts, values, and basic assumptions. The third step is categorize the assumptions as either helping or assisting or hindering what the group wants to accomplish. Finally, the group discusses how they can building on the positive assumptions or mitigate the hindering assumptions to move the organization in the needed direction. This process can take a day or more depending on the complexity of the organization, the people involved, and the facilitators skill.

Organizational Frameworks

Gaining insight into cultural artifacts, values, and assumptions is critical in understanding the organization. Organizational scholars have developed theories on how leaders can best control and direct groups and organizations. These theorists can be divided into four camps or groups.¹⁶ First are the rational system theorists who emphasize organizational goals and structures which best fit the surrounding environment. Human

resource theorists focus on the interdependence between people and organizations. They look for ways to create a better fit of people's needs and skills with organizational goals. Political theorists see power and resource allocation as key issues within an organization. Their focus is on managing power, bargaining, and conflict. Symbolic theorists look at the concept of images and meaning within an organization. Lee Bolman and Terrence Deal use these theory categories to present four perspectives or "frames" through which leaders can look at their organizations to gain an understanding of what the organization is like and how it should be. The "frames" can act as a guide in questioning and assessing an organization's culture.

The **structural frame**, from the rational systems theorists, is the frame most in the military are familiar with. It emphasizes formal roles and relationships and is depicted by organization charts or wiring diagrams.¹⁷ Units or groups are created and shaped to meet the challenges of the surrounding environment. When the environment changes and the structure no longer fits the situation, the group must undergo a reorganization.

Because organizations are made up of people, the **human resource frame** focuses on people's needs, feelings, tendencies, strengths, and weaknesses. People have a large capacity to learn and, a sometimes greater ability to cling on to past practices and beliefs. From this perspective, an organization must be laid out to allow people to get the job done while feeling good about themselves.

Power is at the root of all considerations in the **political frame**. This frame is marked by the constant struggle for scarce resources. This constant struggle leads to conflict, negotiation, bargaining, and compromise, all a part of everyday life in the organization. Political skill and savvy are crucial to survival, survival of the fittest.

The **symbolic frame** views an organization as being held together by shared values and culture rather than by bureaucratic goals and policies. The organization is viewed in a spiritual manner with symbols, rituals, ceremonies, legends, heroes, and myths.

Each frame has its merit. To be most effective, Bolman and Deal argue leaders should use all four frames to gather insight into an organization. The frames can be used to clarify what is going on and what options to consider. Leaders should evaluate situations through each frame and integrate their perceptions into a personal theory of the organization.

Notes

¹Schein, Edgar H. *Organizational Culture and Leadership*. 2nd ed. San Francisco: Jossey-Bass Publishers, 1992.

²Ibid.

³Drennan, David. *Transforming Company Culture: Getting Your Company From Where You Are Now To Where You Want To Be*. London, McGraw-Hill, 1992.

⁴Schein, Edgar H. *Organizational Culture and Leadership*. 2nd ed. San Francisco: Jossey-Bass Publishers, 1992.

⁵Schein, Edgar H. *Organizational Culture and Leadership*. 2nd ed. San Francisco: Jossey-Bass Publishers, 1992.

⁶Ibid.

⁷Ibid.

⁸Bounds, Greg, Lyle Yorks, Mel Adams, and Gispie Ranney. *Beyond Total Quality Management*. New York: McGraw-Hill Inc., 1994.

⁹Morgan, Scott, "Air University Faculty Socialization: A Comparative Analysis." Ph.D. diss., Feb. 1997.

¹⁰Schein, Edgar H. *Organizational Culture and Leadership*. 2nd ed. San Francisco: Jossey-Bass Publishers, 1992.

¹¹Ibid.

¹²Ibid.

¹³Ibid.

¹⁴Ibid.

¹⁵Ibid.

¹⁶Bolman, Lee G., and Terrence E. Deal. *Modern Approaches to Understanding and Managing Organizations*. San Francisco: Jossey-Bass Inc., 1988.

¹⁷Ibid.

Chapter 3

Organizational Change Concepts

Our Air Force is undertaking a quiet revolution—a move to new ways of doing business across the whole range of our activities

—Sheila Widnall
Secretary of the Air Force

Given an environment of constant change, what are the keys to understanding, introducing, and following through on change? Organizational scholars have many theories for implementing change in a group or organization. This includes basic change models and the concepts of unfreezing, restructuring, and refreezing an organization. Bolman and Deal's concept of organizational frames, introduced in Chapter 2, helps leaders anticipate issues that may arise as the result of change. In addition, a model for effort and change can guide leaders in following through to implement lasting change.

Unfreezing, Restructuring, and Refreezing

According to Dr. Edgar Schein, the way in which culture can and does change depends upon the stage at which the organization finds itself.¹ In the growth stage, leaders the development of group values and assumptions. They do this through what they pay attention to, control, and reward; how they allocate resources; how they select, promote, and “deselect” people.² As the organization matures, the leaders ability to

manipulate culture diminishes. Changing deeply held values and assumptions requires considerable effort and time. Schein proposes a three step model; unfreezing, restructuring, and finally refreezing, as the root for making change.³

The unfreezing process begins with information or data showing negative trends or tendencies. The organization is failing to meet some of its goals or its systems are not working as efficiently as required. This negative information must then be recognized and explicitly linked to important organizational goals to produce a feeling of guilt or anxiety within the organization. The leader then must provide a vision to serve as a psychological bridge from the current situation to the new, better state of affairs.

With the system “unfrozen,” the organization must think about restructuring their basic assumptions. This restructuring or redefinition produces a new or adjusted set of basic assumptions and a change in behavior. Finally, this new behavior and desired set of assumptions and beliefs must be continually reinforced until there is no anxiety in the system and the organization is stabilized. This model provides the basis for organizational change in all stages of organizational development. Appendix A shows Schein’s change mechanisms based on the stage of organizational development.

Using Frames in Change

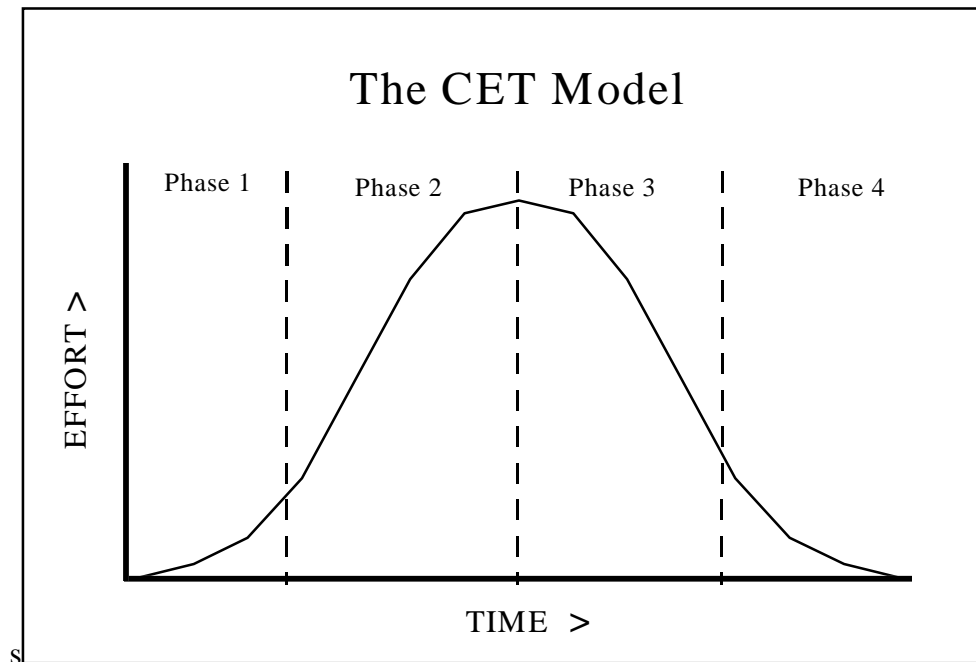
Leaders can use the concept of frames to think about and forecast the impact of change on other portions of the organization. By anticipating how changes in one frame might effect the conditions in another, the leaders and managers may be able to introduce plans or initiatives to reduce the disruptions or chaos.⁴ For example, if a reorganization is required to meet changes in the external environment, the leader should ask questions in

terms of each of the four frame: What are the specific roles and responsibilities of people in the new organization? Do they overlap? Do we have people with the right skills and attitude to fulfill these new roles? How do we get or create these people and retain them? Does the current resource allocation process support the new structure? Are the organizations values and basics assumptions in alignment with the new structure? Can they be built on or adjusted to support the new structure? The changing environment will inevitably produce misalignments within the organization. Using the concept of frames helps uncover potential misalignments and create proactive plans to correct them.

Change Equals Effort Over Time Model

Implementing change in an organization takes a great deal of time and energy. Mr. Clay Carr's Change equals Effort over Time (CET) model at figure 1, is a simplified way to visualize the effort, in terms of time and attention, needed to successfully institutionalize change.⁵ The x-axis represents time from the beginning of a change initiative. Effort, on the y-axis, represent that extra effort or attention needed above what is needed to do something the old way. By no means is this an exact model. There is no way to specifically calculate the magnitude of effort required. This model is merely a tool to understand the issue of change and the relative effort needed to implement it.

In the CET model, Carr breaks the change process down into four phases. Phase 1 is the kick-off phase, marked with fanfare and excitement. Typically, this phase includes speeches, handouts, and a promise of a rosy future. Carr cautions leaders to not focus all of their attention on the change launching process without a clear idea or vision of what they expect will happen when it's all over and the investment needed to get there.⁶



Source: Carr, Clay. "Following Through On Change." *Training*, v 26, no. 139 Jan 1989 39-44.

Figure 3. Change equals Effort over Time Model

The real hard work begins in Phase 2. Here, people learn new ways of doing business. It could be a new process, procedure, or piece of equipment.⁷ In this phase, organizational and personal habits, rituals, and patterns come into question. Questions such as "Why do we have to change, the old way was good enough to get us here?" arise. Morale may drop and commitment to the change can begin to waver. Even if the change is started with a high energy kick off in Phase 1, it is nearly impossible for this motivational high to carry the change through Phase 2.⁸

Phase 3 marks turning the corner on change. This phase represents the repeated application of new methods in the workplace. Although not easy, the new process or procedure gains acceptance and familiarity.⁹ While the amount of effort needed to do it the "new way" is decreasing, it still requires more effort than doing it the "old way."

Phase 4, marks the successful end of the change initiative. The desired change is institutionalized within the organization. The new process is as easy, if not easier, to do as the old way and it is now the norm.

Carr describes four lessons we can learn from the CET model.¹⁰ First, success demands realism. Leaders must to take a realistic assessment of time and effort over the entire span of the change process. All of the excitement in the world can not carry people through phases 2 and 3. Unwillingness to look at the total time and effort contributes to failure. Next, understanding true amount of time and effort needed allows the leader to make a realistic analysis and ensure the change is legitimate. Do people believe or understand that the change is needed? Will the time and effort investment pay off in the long run? Third, one can use the CET model to communicate the status of change to the work force. Just as many organizations track or monitor contributions to the United Way or Combined Federal Campaign, leaders can plot the relative status of the change on the CET curve to show managers and employees where they are in the process and remind them that it still requires emphasis. People will see the relative amount of effort needed and be prepared for problems and difficulties. Finally, the CET helps follow through on support for change. Leaders can see that while they may have turned the corner and entered Phase 3, the new way still takes more effort. As a result, leaders should strive to keep the time pressures of the job in check and allow the new way of doing business to take root and become institutionalized.

Notes

¹Schein, Edgar H. *Organizational Culture and Leadership*. 2nd ed. San Francisco: Jossey-Bass Publishers, 1992.

²Ibid.

³Ibid.

⁴Bolman, Lee G., and Terrence E. Deal. *Modern Approaches to Understanding and Managing Organizations*. San Francisco: Jossey-Bass Inc., 1988.

⁵Carr, Clay. "Following Through On Change." *Training*, v 26, no. 139 (Jan 1989) [39-44].

⁶Ibid.

⁷Ibid.

⁸Ibid.

⁹Ibid.

¹⁰Ibid.

Chapter 4

The Quality Air Force

A quality Air Force is a leadership commitment and operating style that inspires trust, teamwork, and continuous improvement everywhere in the Air Force

—General Ronald R. Fogleman
Chief of Staff, United States Air Force

In the early 1990's, United States Air Force Chief of Staff Merrill A. McPeak set out to “ensure Quality Air Force approach becomes a part of our culture.”¹ His intentions were to shape the culture of an organization of more than one-half million military and civilians ranging from pilots and aircraft maintenance personnel to scientists and engineers to cooks and policemen to doctors and lawyers. What was the background behind this drive to shape Air Force culture? How did the Air Force set out to implement this cultural change? Did it follow concepts and ideas espoused by organizational scholars? From these questions, we can learn a great deal about organizational change.

Roots of the Quality Air Force—Top Level

The initial force behind Quality Air Force (QAF) dates back to 1986. First, President Ronald Reagan signed Executive Order 12552 requiring increased productivity within all agencies of the executive branch. In implementing the order, the Office of Management and Budget directed implementation of Total Quality Management (TQM) government-

wide.² In addition, Congress passed the Goldwater-Nichols Department of Defense Reorganization Act. While this act is typically associated with changing the power and duties of the Secretary of Defense, Chairman of the Joint Chiefs of Staff, and the warfighting commanders-in-chief, the Act also had provisions to start the quality movement within the Department of Defense (DOD). It called for the Department to:

...increase in decentralization of authority within the Department of Defense; reduce and streamline the defense bureaucracy; provide for the more efficient use of resources; require elimination of duplication between the headquarters staffs.

Secretary of Defense Frank Carlucci's March 30, 1988 memorandum highlighted DOD's embrace of TQM. The initial intent of DOD TQM was to improve the Department's acquisition processes and interface with the civilian defense industry.³ As a result, Air Force Systems Command and Air Force Logistics Command were the first organizations to embark on the quality journey in the Air Force.

In his November 1991 video, *Tomorrow's Air Force*, General McPeak, United States Air Force Chief of Staff, introduced the term Total Quality Air Force.⁴ It was to be the "next phase" in his quest for a "leaner, tougher, stronger Air Force." During his speech to the Air Force Association Air Warfare Symposium in January 1992, the general outlined his plans for this phase, now called Quality Air Force.⁵ His intent was to ensure the QAF approach became part of Air Force culture. In his words, "QAF empowers people with opportunity, authority, and resources to improve the organization through their own creative initiative."⁶ The Air Force created a quality council of senior leaders to oversee the process. General McPeak and Undersecretary Anne Foreman co-chaired the council because "QAF is too important to hand off to someone else."⁷

The Air Force set out and created a new vision:

Air Force people building the world's most respected air and space force—global power and reach for America.

It followed by defining a mission statement, core values, basic principles, and an operating style. This new Air Force vision-mission hierarchy gave all units a common target to head their organizations toward, no matter how mature their quality program was. To help guide the process, the Air Force established a Quality Institute at Maxwell Air Force Base. In 1993, the Air Force changed unit effectiveness inspections by shifting to a Quality Air Force Assessment (QAFA) using Air Force Quality Criteria. The QAFA was based on Malcolm Baldrige Quality Award criteria used to recognize United States companies that excelled in quality management and quality achievement.

Major Command, Base, and Unit Level

Base and unit level organizations set out on their own quality journeys. Some units took a cautious approach to not get caught up in the “next management fad” trap. On the other extreme, some units dashed to be the first to implement quality throughout their organization.

While quality programs varied somewhat from unit to unit, they had similar components including “off sites” with key unit leaders to establish unit mission statements and objectives, quality councils, a unit quality person or staff, personal and team training, strategic plans, individual and team quality awards programs, process action teams, and development of measurement indicators or metrics.

The basic thrust of a unit quality programs was training. Training courses and workshops ranged from four hour awareness courses through week long team member

and team leader training to four week long quality instructor courses. Content focused on customer satisfaction, teamwork skills, and continuous process improvement.

Analysis

Today, after more than five years of implementing quality, some service members ask “are we there yet?” Or, “has the quality movement fallen out of favor as so many other management initiative?” Stacking the QAF implementation efforts against the theories and philosophies of organizational scholars can shed light on these questions.

It appears Air Force leadership tried using Schein’s concepts for change. General McPeak set out to “unfreeze” the Air Force during his July 1992 video, Two Kinds of Change. In the video, he described the changes as being driven by budget reductions and restructuring initiatives.⁸ The restructuring initiatives were described as being controlled by the Air Force and focused on streamlining and flattening organizations, increasing accountability, and decentralization.⁹ Unfortunately, the message did not highlight or forecast negative trends in terms of meeting Air Force goals or generate guilt or anxiety within the Service. The message of QAF was lost in general’s comments on losses in wings and fighter wing equivalents and the need for another senior officer selective early retirement board (SERB). In addition, this video briefing came on the heels of a series of “mandatory” videos by General McPeak. The novelty had worn off. Personal experience with the video showed many leaders saw the video as “another mandate from the headquarters,” a necessary evil. We were to all watch the video, but should try and get some work done if we could. There was little discussion or reinforcement of the message after the videos were viewed. The general described the changes as “a rough patch” and

the bridge to the future was to “keep your mach up.” This provided little indication as to what needed to be done during the process or how long it would take.

Air Force and individual unit visions, missions, credos, and core values serve as cultural embedding mechanisms. When continually referred to and reinforced by management action, they provide direction to guide action and change. They can be found framed on the walls of most any organization. There they represent a cultural artifact of the organization. It is when these espoused concepts and values are continually reinforced and discussed that they begin to move deeper into the organizations culture and impact basic values and shared assumptions of the group. This takes conscious commitment over time.

Bolman and Deal’s four frames reveal some interesting interrelations between the many changes to the Air Force in the early 1990’s. As one might guess, the structural frame shows the most apparent change to support a quality culture. The reorganizations to the air staff, reduction from 13 to 10 major commands, reductions in size and number of numbered air forces, elimination of air divisions were all done to eliminate management layers and push decision making down to the lowest levels.

This push of authority and responsibility to the unit level developed a need to train people to work in the new quality environment. Training was the major focus of many quality programs. Unfortunately, some organizations made training the quality program and measured successful implementation by the number of people trained. In addition, people were often trained individually. After individual training, they would return to a work place full of energy and desire only to be ignored or have ideas turned down because “things don’t work like that here.” Also from the human resources frame comes the

concept of commitment.¹⁰ Commitment at all levels is critical to institutionalizing QAF.¹¹ In some organizations this important concept was overlooked and commitment turned to resistance when QAF was “crammed down their throats.”¹² Commitment can also be lost when employees see leadership not “walking the walk” by canceling quality council meetings or continually sending replacement attendees, demanding unrealistic leaps in productivity over short periods of time, continually overriding team recommendations, or simply not talking QAF, their trust and commitment waiver and change is stopped dead in its tracks

Through the political frame, the movement of power and authority was reinforced with the movement of 52 general officers from higher headquarters organizations to the wing level.¹³ This showed a major commitment to moving power out of higher levels of the Air Force structure.

The symbolic frame can help explain one of the most misunderstood changes in the early 1990's. As part of the physical reorganization and restructuring of units, General McPeak set out to preserve Air Force legends and heroes by moving the flags or designators of the 13 oldest wings in the Air Force along with key units with significant achievements to active units.¹⁴ As bases closed and units deactivated, the these selected wing designators had precedence over all others. As a result, the units that first made up the Army Air Corps and the early Air Force, along with those having historical significance, such as dropping the only nuclear device in combat, will be maintained. His goal was to maintain the link between the air power legends like LeMay, Eaker, and Spaatz with today's airmen. There was little sympathy for this initiative from those facing downsizing or a SERB.

Clay Carr's Change equals Effort over Time (CET) model indicates the Air Force has entered Phase 3. The excitement and fervor of the new initiative found in Phase 1 has long since worn off. The core education and training of Phase 2 is complete. Now is the time for repeated application and reinforcement of the concepts of trust, teamwork and continuous improvement. As the CET model indicates, a great deal of attention and effort is still required before the cultural change can be considered complete.

Overall, it appears the cultural change to QAF was implemented with mixed compliance with the theories and concepts of organizational scholars. As a result the embrace of QAF has been mixed. It will require continued attention and emphasis on the part of leadership over several more years before a cultural change will be achieved. Without complete leadership commitment, the change will fall short.

Notes

¹McPeak, Gen Merrill A., Air Force Chief of Staff, *Selected Works*. Maxwell Air Force Base, AL.: Air University Press, 1995.

²Burstein, Carolyn and Sedlak, Kathleen, "The Federal Productivity Improvement Effort: Current Status and Future Agenda." *National Productivity Review*, Spring 1988.

³Craig, LtCol Robert G. "Quality in the Operational Air Force: A Case of Misplaced Emphasis." Maxwell AFB, AL.: Air War College, May 1994.

⁴McPeak, Gen Merrill A., Air Force Chief of Staff, *Selected Works*. Maxwell Air Force Base, AL.: Air University Press, 1995.

⁵Ibid.

⁶Ibid.

⁷Ibid.

⁸Ibid.

⁹Ibid.

¹⁰Bolman, Lee G., and Terrence E. Deal. *Modern Approaches to Understanding and Managing Organizations*. San Francisco: Jossey-Bass Inc., 1988.

¹¹Deacy, LtCol Michael K. "Implementation of Quality Air Force at the Group Level Organization and Below." Research Report. Maxwell AFB, Ala.: Air War College, 1995.

¹²Dubroff, Capt. B. Max. "Who's Afraid of the Big, Bad 'Q'?" *Q Vision* 4, no. 2 (Summer 1996) [4].

Notes

¹³McPeak, Gen Merrill A., Air Force Chief of Staff, *Selected Works*. Maxwell Air Force Base, AL.: Air University Press, 1995.

¹⁴Ibid.

Chapter 5

Conclusions

The senior leadership decided that it is time on our quality journey to refocus the program from one of discussion and education to greater emphasis on application

—General Ronald R. Fogleman
Chief of Staff, United States Air Force

The future promises to be an exciting time. While there are many theories on what the future holds, we can all agree there will be a great deal of change. Leaders must be prepared to successfully guide their groups and organizations through change to survive and prosper. This preparation should first begin with an understanding of organizational culture and the levels of culture. Analyzing a groups artifacts, values and beliefs, and basic assumptions will shed insight to the actions and reactions of a group.

Leaders should also understand they are the most important player in the organizational change process. Using culture creating or imbedding mechanisms, especially what they pay attention to sets the tone for the organization. To be most effective, leaders must consistently act in ways that reinforce their values and the desired end state.

In assessing their organization and considering the impacts of change, leaders should look at their organization through a series of perspectives or frames. The structural frame will look at organizational goals and how the group is organized to achieve their goals.

Through a human perspective, leaders can look at how to best match peoples needs and skills with organizational goals. Power and competition for scare resources give a view from the political frame of reference. Finally, a symbolic frame of reference sheds light on portions of a groups culture including symbols, rituals, ceremonies, legends, heroes, and myths.

To implement a specific cultural change, Dr. Edgar Schein describes a process for unfreezing the organization, by creating anxiety in the organization and providing a bridge to a better end state, restructuring organizational basic assumptions, and then, refreezing the new culture by continual reinforcement. The four frames provide an avenue to uncover cultural components to consider in the change process.

Creating meaningful and lasting change takes a great deal of time and effort, often times more than leaders and managers anticipate. The Change equals Effort over Time model, along with the associated four phases of change, provides a framework to consider change, track its general progress and keep unit managers and members apprised of progress.

The United States Air Force has been on an initiative to institutionalize QAF throughout the Service for over five years. Some portions of the change effort were in line with the organizational theories and change concepts. Especially important is the reorganization initiatives, which decentralized decision making and shifted authority to the unit level, and the quality training programs which provided all employees the basic quality tools needed to operate in a quality environment.

There were, however, some holes in the Air Force program. The campaign kick off did not follow Schein process because it failed to generate a true anxiety with the status

quo or offer a path to the future. Indications are the time needed to institutional change was grossly underestimated. Commitment in some organizations was lost when employees were forced to conform or returned from training with no where to apply their new skills. As a result, the Service is still working to complete the cultural change.

It will take continued leadership effort and attention at all levels to complete the job. Leaders must be completely committed to creating the QAF environment of trust, teamwork, and continuous improvement. It is only then that the Air Force will be “an outfit which allows each of its members to achieve their full, God given potential.”¹

Recommendations for Future Study

This project, like many others, has probably generated more questions than it has answered. These questions may lead to areas for further study and research. Organizational change within the Air Force offers several potential research questions: How should the Air Force institutionalize the idea of “airmindeness” within the officer corps? Are the stated core values of excellence, integrity, and service before self truly shared and internalized in all airmen? Should these values apply to civilians? How does Air Force leadership make these the values of the service?

The area of Quality Air Force also poses some interesting areas for research: What has been the return on investment of the Quality Air Force program? How are Quality Air Force activities tied to the Global Engagement Mission? Is Quality Air Force a program or a mindset with in the Air Force?

Notes

¹Viccellio, Gen Henry Jr., Commander, Air Force Materiel Command. Address. Air Force Quality Symposium, Montgomery AL., 19 October 1995.

Appendix A

Cultural Change Mechanisms¹

Organizational Stage	Change Mechanism
Founding and Early Growth	<ol style="list-style-type: none">1. Incremental change through general and specific evolution2. Change through insight from organizational therapy3. Change through promotion of hybrids within the culture
Midlife	<ol style="list-style-type: none">4. Change through systematic promotion from selected subcultures5. Planned change through organizational development projects and creation of parallel learning structures6. Unfreezing and change through technological seduction
Maturity and Decline	<ol style="list-style-type: none">7. Change through infusion of outsiders8. Unfreezing through scandal and myth explosions9. Change through turnarounds10. Change through coercive persuasion11. Destruction and rebirth

Notes

¹Schein, Edgar H. *Organizational Culture and Leadership*. 2nd ed. San Francisco: Jossey-Bass Publishers, 1992.

Appendix B

Cultural Embedding Mechanisms¹

Based on Edgar H. Schein's text, *Organizational Culture and Leadership*. 2nd ed. San Francisco: Jossey-Bass Publishers, 1992

Primary Embedding Mechanisms

Mechanism	Notes and Comments
What leaders pay attention to, measure, and control on a regular basis	<ul style="list-style-type: none">- One of the most powerful embedding mechanisms- Can be anything leaders notice or question- May include casual comments- Consistency is important, not intensity
How leaders react to critical incidents and organizational crises	<ul style="list-style-type: none">- Creates new organizational norms, values, and working procedures- Reveals important underlying assumptions- Heightened emotions increases the intensity of learning- Also consider what leadership considers a crisis
Observed criteria by which leaders allocate scarce resources	<ul style="list-style-type: none">- Best described as “putting your money where your mouth is”- Includes the actual resource allocation process—top down versus bottom up
Deliberate role modeling, teaching, and coaching	<ul style="list-style-type: none">- A Leaders visible behavior communicates values and assumptions- Accomplished formally or informally- Informal messages are the more powerful teaching and coaching mechanism

Primary Embedding Mechanisms (Continued)

Mechanism	Notes and Comments
Observed criteria by which leaders allocated rewards and status	<ul style="list-style-type: none">- Includes promotions, appraisal ratings, and punishments- What really happens is important, not what is espoused or preached- Promotion and reward system must be consistent with underlying assumptions- Judged over the long term
Observed criteria by which leaders recruit, select, promote, retire, and excommunicate organizational members	<ul style="list-style-type: none">- Subtle yet potent method to embed and perpetuate cultural assumptions- Often operates unconsciously in organizations- Founders and leaders hire those who resemble their desired style, assumptions, values, and beliefs- Includes who is isolated from the group and who gets retired early

Secondary Articulation and Reinforcement Mechanisms

Mechanism	Notes and Comments
Organization design and structure	<ul style="list-style-type: none">- How responsibilities are divided up- Autonomous versus interdependent units<ul style="list-style-type: none">- Organization stability over time- Usually interpreted by employees in different ways
Organizational systems and procedures	<ul style="list-style-type: none">- Recurring and routine tasks and reporting- Tend to provide structure and predictability<ul style="list-style-type: none">- Reduces ambiguity and anxiety- Can support what leaders pay attention to
Organizational rites and rituals	<ul style="list-style-type: none">- Includes ceremonies and productions- Ritualize behaviors can become important reinforcers- In conducting analysis, typically provides limited insight to organizational assumptions

Secondary Articulation and Reinforcement Mechanisms (Continued)

Mechanism	Notes and Comments
Design of physical space, facades, and buildings	<ul style="list-style-type: none">- Visible features customers, clients, new employees, and vendors encounter- May reflect assumptions of those outside the organization., i.e. architects, designers- Should be carefully managed- Reflects how work gets done and how relationships are managed, i.e., individual offices versus open office environment
Stories, legends, and myths about people and events	<ul style="list-style-type: none">- Reinforces assumptions and teaches assumptions to new employees- Often become very distilled or ambiguous- Leaders can not control or manage stories- Difficult to infer the point of the story
Formal statements of organizational philosophy, values, and creed	<ul style="list-style-type: none">- Typically highlight a very small portion of an organizations assumption set- Way of emphasizing special things or ideas- Can not be viewed as a way of defining an organization's culture

Notes

¹Schein, Edgar H. *Organizational Culture and Leadership*. 2nd ed. San Francisco: Jossey-Bass Publishers, 1992.

Bibliography

- Bolman, Lee G., and Terrence E. Deal. *Modern Approaches to Understanding and Managing Organizations*. San Francisco: Jossey-Bass Inc., 1988.
- Bounds, Greg, Lyle Yorks, Mel Adams, and Gispie Ranney. *Beyond Total Quality Management*. New York: McGraw-Hill Inc., 1994.
- Burstein, Carolyn and Sedlak, Kathleen, "The Federal Productivity Improvement Effort: Current Status and Future Agenda." *National Productivity Review*, Spring 1988.
- Carr, Clay. "Following Through On Change." *Training*, v 26, no. 139 (Jan 1989) [39-44].
- Craig, Lt Col Robert G. "Quality in the Operational Air Force: A Case of Misplaced Emphasis." Maxwell AFB, AL.: Air War College, May 1994.
- Deacy, Lt Col Michael K. "Implementation of Quality Air Force at the Group Level Organization and Below." Research Report. Maxwell AFB, Ala.: Air War College, 1995.
- Drennan, David. *Transforming Company Culture: Getting Your Company From Where You Are Now To Where You Want To Be*. London, McGraw-Hill, 1992.
- Dubroff, Capt. B. Max. "Who's Afraid of the Big, Bad 'Q'?" *Q Vision* 4, no. 2 (Summer 1996) [4].
- Fogleman, Gen Ronald R., Air Force Chief of Staff, "Air Force: The Future is Ours...Today." Address. Air Force Association Symposium, Los Angeles, CA, 27 October 1995.
- Fogleman, Gen Ronald R., Air Force Chief of Staff, "Air Force Quality: On Course into the 21st Century," Address. Air Force Quality Symposium Banquet, Montgomery, Ala., 17 October 1996.
- Fogleman, Gen Ronald R., Air Force Chief of Staff, "Directions." Address. Air Force Association Symposium, Los Angeles, CA., 28 October 1994.
- Fortune Cookies: Management Wit and Wisdom from Fortune Magazine*. New York: Vintage Books, 1993.
- McPeak, Gen Merrill A., Air Force Chief of Staff, *Selected Works*. Maxwell Air Force Base, AL.: Air University Press, 1995.
- Mehuron, Tamar A. "The Air Force in Facts and Figures." *Air Force Magazine* 79, no. 5 (May 1996): [40].
- Morgan, Scott, "Air University Faculty Socialization: A Comparative Analysis." Ph.D. diss., Feb. 1997.
- Schein, Edgar H. *Organizational Culture and Leadership*. 2nd ed. San Francisco: Jossey-Bass Publishers, 1992.
- Viccellio, Gen Henry Jr., Commander, Air Force Materiel Command. Address. Air Force Quality Symposium, Montgomery AL., 19 October 1995.

DISTRIBUTION A:

Approved for public release; distribution is unlimited.

Air Command and Staff College
Maxwell AFB, Al 36112