

ACHIEVING CROSS-DOMAIN SYNERGY:
OVERCOMING SERVICE BARRIERS
TO JOINT FORCE 2020

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MASTER OF MILITARY ART AND SCIENCE
Strategic Studies

by

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The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

ABSTRACT

ACHIEVING CROSS-DOMAIN SYNERGY: OVERCOMING SERVICE BARRIERS TO JOINT FORCE 2020, by Lieutenant Commander Michael S. Choe, 173 pages.

In September of 2012, the Chairman of the Joint Chiefs of Staff released *A Capstone Concept for Joint Operations: Joint Force 2020* (CCJO) which lays out a concept of “Globally Integrated Operations” that relies heavily on the individual services to embrace Joint integration and collaboration despite clear cultural barriers that may make such cooperation difficult. The purpose of this thesis was to identify the primary service barriers to Joint integration and find solutions to overcome them. This study has determined that each of the services have developed their own unique cultures that have influenced their approach to Joint concepts. Through case studies it was revealed that these unique approaches can become friction points and even develop as barriers to change and Joint integration. The primary service barriers to the CCJO were identified as (1) Threat to Service Mission, (2) Threat to Service Identity and Independence, (3) Threat to Service Budget, and (4) Institutional Inertia. In finding solutions to overcome these barriers, it was discovered that a corporate solution such as the cultural analysis performed during mergers, acquisitions, and joint ventures may be necessary to mitigate individual service resistance to implementing the Joint Force 2020 concept.

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TABLE OF CONTENTS

	Page
MASTER OF MILITARY ART AND SCIENCE THESIS APPROVAL PAGE	iii
ABSTRACT.....	iv
ACKNOWLEDGMENTS	v
TABLE OF CONTENTS.....	vi
ACRONYMS.....	x
ILLUSTRATIONS	xii
TABLES	xiii
CHAPTER 1 INTRODUCTION	1
Background.....	1
Primary Research Question	2
Secondary Research Question	3
Assumptions.....	3
Definitions	3
Limitations	4
Scope and Delimitations	4
Significance of Study.....	4
Summary and Conclusion.....	5
CHAPTER 2 LITERATURE REVIEW	7
Introduction.....	7
Review of Literature	7
Lewins Force Field Analysis	8
The Competing Values Framework	9
The Four Major Culture Types	11
The Kotter Model.....	13
The Six Levers for Managing Organizational Culture.....	15
Culture Planning for Mergers and Acquisitions	21
Combination Forms	22
Combining Organizations and Cultures.....	24
Unfreezing, Changing, Refreezing	25
The Chaos Imperative	26
Summary and Conclusion.....	28

CHAPTER 3 METHODOLOGY	33
Introduction.....	33
Research Methodology	33
Summary and Conclusion.....	34
CHAPTER 4 ANALYSIS	35
Introduction.....	35
Presentation of Findings	36
Primary Research Question	36
Cultural Primer of the Different Services	36
Understanding Culture	36
Service Cultures	39
The Army	39
Artifacts	39
Espoused Beliefs and Values	40
Who they Are	41
What they Do	41
Basic Underlying Assumptions	42
Soldiers First	42
The Army is a Team Player and a Joint Leader	43
Tactics before Strategy.....	43
The Navy.....	45
Artifacts	45
Espoused Beliefs and Values	46
Who they Are	46
What they Do	46
Basic Underlying Assumptions	47
Dedication to Tradition	47
Independence and Stature	48
The Number of Ships is Important.....	49
Concepts are More Useful than Doctrine.....	49
Obsessed with Tactics and Technology:.....	50
The Marines	51
Artifacts	51
Espoused Beliefs and Values	52
Who they are	52
What they Do	53
Basic Underlying Assumptions	53
Soldiers from the Sea	53
Need for Institutional Survival Drives Innovation.....	54
Making Marines and Winning Battles	55
The Air Force	56
Artifacts	56
Espoused Beliefs and Values	58

Who they are	58
What they Do	58
Basic Underlying Assumptions	58
The Superiority of Air Power	58
Quality over Quantity	59
Love for Technology and Flight	60
Future Oriented and Uninhibited by Tradition	60
An Emerging Joint Culture	61
Differing Perspectives on Joint Concepts	63
Mission Command	63
Army	65
Navy	66
Marine Corps	68
Air Force	69
Joint Doctrine	71
Planning	72
The Role of Airpower	77
Army	77
Marine Corps	82
Navy	85
Air Force	89
Case Study–Air-Sea Battle: Cultural Bridge or Friction Point?	92
The Air-Sea Battle Concept	93
Perceived Threat to the Landpower Mission	94
The Air Force and the Navy: From Deconfliction to Integration	96
Conclusion	102
Barriers Identified	103
Threats to Service Missions	103
Threats to Service Identity and Independence	104
Threats to Service Budgets	108
Institutional Inertia / Engines for Stability	111
Secondary Research Question	113
Force Field Analysis	114
Culture Planning for Mergers and Acquisitions	115
The Chaos Imperative	116
Summary and Conclusion	118
CHAPTER 5 CONCLUSION AND RECOMMENDATIONS	131
Introduction	131
Summary of Research and Analysis	131
Recommendations	132
Course of Action 1–Change the Culture by Merger	134
Course of Action 2–Integrate Cultures through a Joint Venture Approach	136
Course of Action 3–Retain Culture with an Alliance Approach	137
Summary and Conclusion	140

APPENDIX A1 ARMY ARTIFACTS	142
APPENDIX A2 ARMY ESPOUSED BELIEFS AND VALUES	143
APPENDIX A3 ARMY CORE COMPETENCIES	144
APPENDIX B1 NAVY ARTIFACTS.....	145
APPENDIX B2 NAVY ESPOUSED BELIEFS AND VALUES	146
APPENDIX B3 NAVY STRATEGY AND MISSIONS	147
APPENDIX C1 MARINE CORPS ARTIFACTS.....	148
APPENDIX C2 MARINE CORPS ESPOUSED BELIEFS AND VALUES	150
APPENDIX C3 MARINE CORPS MISSION, APPROACH, AND VISION.....	151
APPENDIX D1 AIR FORCE ARTIFACTS	152
APPENDIX D2 AIR FORCE ESPOUSED BELIEFS AND VALUES.....	153
APPENDIX D3 AIR FORCE MISSION, ENDURING CONTRIBUTIONS, AND OPERATIONS.....	154
APPENDIX E NAVAL AVIATOR VS. AIR FORCE PILOT ANECDOTE	155
APPENDIX F CORPORATE CULTURE PLANNING CHECKLIST	156
BIBLIOGRAPHY	157

ACRONYMS

A2/AD	Anti-Access/Area Denial
ACE	Air Combat Element
ACU	Army Combat Uniform
ADP	Army Doctrine Publication
AO	Area of Operations
AOC	Air Operations Center
ASB	Air Sea Battle
ASU	Army Service Uniform
ATO	Air Tasking Order
C2	Command and Control
CAOC	Coalition Air Operations Center
CAS	Close Air Support
CCJO	Capstone Concept for Joint Operations
CFACC	Coalition Forces Air Component Commander
COIN	Counter Insurgency
COMAFFOR	Commander Air Force Forces
CSG	Carrier Strike Group
CVF	Competing Values Framework
CWC	Composite Warfare Concept
DOD	Department of Defense
FFA	Force Field Analysis
FOB	Forward Operating Base
FSCL	Fire Support Coordination Line

GIO	Globally Integrated Operations
ISR	Intelligence, Surveillance, Reconnaissance
JCS	Joint Chiefs of Staff
JFACC	Joint Forces Air Component Commander
JFMCC	Joint Forces Maritime Component Commander
JOAC	Joint Operational Access Concept
JOPP	Joint Operational Planning Process
JOPPA	Joint Operational Planning Process Air
JTF	Joint Task Force
OCAI	Organizational Culture Assessment Instrument

ILLUSTRATIONS

	Page
Figure 1. Force Field Analysis Example	9
Figure 2. Competing Values Framework	11
Figure 3. Nine Steps for Culture Change Using CVF	13
Figure 4. Why Change Fails	14
Figure 5. Kotter’s 8 Step Model for Leading Change	15
Figure 6. Six Levers for Managing Organizational Culture	20
Figure 7. Types of Strategic Combinations	23
Figure 8. Cultural Combination Forms	24
Figure 9. Lewin’s Three-Step Process for Change Management	26
Figure 10. Steps for Harnessing Chaos	28
Figure 11. List of Change Models	30
Figure 12. The Three Levels of Culture	37
Figure 13. Planning Model Comparison	74
Figure 14. Aviation Brigade’s Role in Army Warfighting Functions	79
Figure 15. Army FSCL Placement in OIF	81
Figure 16. The Six Functions of Marine Aviation	84
Figure 17. Attributes of Different Forms of Air Power	100
Figure 18. Camouflage Uniforms of the Different Services	108
Figure 19. Force Field Analysis	115
Figure 20. Barriers to Joint Force 2020	132
Figure 21. Knights of the Round Table Approach to Joint Organization	139

TABLES

	Page
Table 1. Mission Command.....	72
Table 2. Differences in Planning Processes	75
Table 3. Missions of Naval Aircraft.....	87

CHAPTER 1

INTRODUCTION

There is nothing more difficult to arrange, more doubtful of success, and more dangerous to carry through, than to initiate a new order of things.

— Niccolò Machiavelli, *The Prince*

Background

In September of 2012, General Martin E. Dempsey, Chairman of the Joint Chiefs of Staff released *A Capstone Concept for Joint Operations: Joint Force 2020* (CCJO). The concept supports the Defense Strategic Guidance document released by the Secretary of Defense in January 2012 titled *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense*. The new guidance highlights the changing nature of the threat and the current fiscal environment as the reasons for needing to change defense policies and to prioritize resources.¹

The CCJO lays out a vision for how the Joint Force should operate. There is heavy reliance on the individual services to embrace Joint integration and collaboration despite clear cultural barriers that may make such cooperation difficult. History is replete with examples of service barriers that have impeded collaboration and innovation within the military. If Joint Force 2020 is going to be the solution to meet the future threat in a challenging fiscal environment then it is important to recognize and identify the primary service barriers to integration and find solutions to overcome them.

At the core of the Joint Force 2020 concept are Globally Integrated Operations (GIOs) which focus on a “globally postured Joint Force to quickly combine internal capabilities and mission partners across domains, echelons, geographic boundaries, and

organizational affiliations. These networks of forces and partners will form, evolve, dissolve, and reform in different arrangements in time and space with significantly greater fluidity than today's Joint Force.”²

The eight elements of globally integrated operations are:

1. Mission command
2. Seize, retain and exploit the initiative
3. Global agility
4. Partnering (Inter-agency, NGO, IGO)
5. Flexibility in establishing Joint Forces
6. Cross-domain synergy
7. Use of flexible, low-signature capabilities
8. Increasingly discriminate to minimize unintended consequences³

Leading organizational change can be a challenge for any organization, let alone a Joint force comprised of different services with unique organizational cultures. While much has been written on identifying potential barriers to collaborating as a Joint force, little has been written on overcoming those barriers, particularly towards the goal of implementing the Joint Force 2020 concept.

There has been ample research done, however, in the civilian sector, particularly in the field of business, on how to overcome cultural barriers in order to implement change, e.g. mergers, acquisitions and joint ventures. In pursuit of a proven method for organizational change, this study will focus on how civilian models can be applied to overcoming the primary service barriers to the CCJO.

Primary Research Question

What are the primary barriers within the military services that might impede Mission Command, Flexibility in Establishing Joint Forces and Cross-domain Synergy?

Secondary Research Question

What methods for dealing with change that are used by civilian organizations can be tailored to address the cultural issues unique to the military?

Assumptions

It is the assumption of this study that the solutions presented for overcoming cultural barriers in the civilian sector will be appropriate for the military. Additionally, because some of the references presented in this study were written before the Goldwater-Nichols Act which reorganized the Department of Defense in 1986, this study makes assumptions that some of the cultural characteristics of the services are still valid today. In cases where there were clear transformations, efforts were made to delineate the cultural changes that have since occurred.

Definitions

Cross-domain Synergy—the complementary vice merely additive employment of capabilities across domains in time and space.⁴

Cultural Barrier—Organizational artifacts, espoused beliefs and values, and basic underlying assumptions that prevent collaboration, integration, or partnering with another organization.⁵

Institutional Inertia—the relative absence of innovation or change due to the accumulation of policies, regulations, practices, and customs over time.⁶

Joint Force—A general term applied to a force composed of significant elements, assigned or attached, of two or more Military Departments operating under a single joint force commander.⁷

Mission Command—the conduct of military operations through decentralized execution based upon mission type orders.⁸

Limitations

This study is limited primarily by the time available to conduct the research and the existing body of literature on the topics of service cultures and organizational change. While being an officer in the US Navy, this author has made every effort to remove perceptions of service bias in the writing of this thesis. Still, possible bias may exist in the identification of the service barriers and the selection of the solutions for overcoming them based on the author's own education and experience.

Scope and Delimitations

While service barriers to change could exist in any or all of the GIO elements listed above, the scope of this research will be limited to three elements—Mission Command, Flexibility in establishing Joint Forces and Cross-Domain Synergy. These elements were chosen because each of the services have very ingrained procedures for Mission Command, and their unique approaches to Joint concepts may pose as barriers to Cross-Domain Synergy and Flexibility in Establishing Joint Forces. It is also the intent of this study to focus on overcoming military cultural barriers in the context of the CCJO—Joint Force 2020.

Significance of Study

It is the goal of this study to provide value to senior strategic leaders within the military by identifying some of the key cultural risks in the CCJO and offering solutions to mitigate them. Additionally, the cultural primer of the different services acts as a

compendium of the most relevant and up to date references on inter-service culture and should provide a better understanding of the military services and how they approach Joint concepts.

Summary and Conclusion

This study will focus on the potential challenges of implementing the CCJO through the lens of organizational culture and offer up solutions based on existing proven principles that are being utilized in the civilian sector. Chapter 2 will review the prominent literature centered on the primary and secondary research questions listed above. An explanation of the methodology used in the research will be described in chapter 3. Chapter 4 will provide a cultural primer of the different services as well as an analysis of the cultural barriers in the military and solutions to overcome them. Chapter 5 will provide the conclusion and recommendations for overcoming service barriers to successfully implement the Joint Force 2020 concept.

¹Department of Defense, *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense* (Washington, DC: Government Printing Office, January 2012), http://www.defense.gov/news/defense_strategic_guidance.pdf (accessed March 28, 2014).

²Joint Chiefs of Staff, *Capstone Concept for Joint Operations: Joint Force 2020* (Washington, DC: Government Printing Office, September 2012), http://www.dtic.mil/futurejointwarfare/concepts/ccjo_2012.pdf (accessed May 7, 2014).

³Ibid.

⁴Ibid., 7.

⁵Edgar H. Schein, *Organizational Culture and Leadership*, 4th ed. (San Francisco: Jossey-Bass, 2010), 18.

⁶Adrian Pavia, “Confronting Institutional Inertia,” <http://www.govloop.com/profiles/blogs/confronting-institutional-inertia> (accessed April 3, 2014).

⁷Google.com, “Joint Force definition,” <https://www.google.com/search?q=joint+force+definition&ie=utf-8&oe=utf-8&aq=t&rls=org.mozilla:en-US:official&client=firefox-a&channel=sb> (accessed April 4, 2014).

⁸Joint Chiefs of Staff, Joint Publication (JP) 3-0: *Joint Operations* (Washington, DC: Government Printing Office, August 2011), II-2.

CHAPTER 2

LITERATURE REVIEW

Introduction

The CCJO lays out a vision for the individual services to embrace Joint integration and collaboration despite clear cultural barriers that may make such cooperation difficult. If Joint Force 2020 is going to be the solution to meet the future threat in a challenging fiscal environment then it is important to identify and recognize the primary service barriers to change and find solutions to overcome them. This chapter presents a brief review of the literature on organizational change. In pursuit of parsimony and coherence, the literature that details the particulars of the culture of the services and the Joint Force will be reviewed in conjunction with the analysis of those cultures in chapter 4. The review of the literature for the possible solutions to overcome service barriers to Joint Force 2020 is provided below.

Review of Literature

In a review of the change models used by civilian organizations, several were found that could apply to the potential cultural barriers to the CCJO. Because there were a plethora of models to review in the time allotted for this research, the criteria for inclusion was based on the author's judgment on the suitability of the models to enable organizational change within the military. The following models will be included in the review of literature: (1) Lewins Force Field Analysis; (2) Competing Values Framework; (3) Kotter's 8-Step Change Model; (4) The Six Levers for Managing Organizational

Culture; (5) Culture Planning for Mergers and Acquisitions, and (6) The Chaos Imperative.

Lewins Force Field Analysis

The Force Field Analysis (FFA) tool was developed by Dr. Kurt Lewin in the 1940s to aid in the development of his work in social psychology. It has since been used as a popular decision-making tool for businesses and organizations. The tool is generally used for two purposes: to decide whether to go ahead with a change; and to increase the likelihood of success, by strengthening the forces supporting change and weakening those against it.¹

The FFA is used by placing all the driving forces that support a change against all the restraining forces that act to prevent it. A graphical representation portrays the current state and whether the net forces are driving the organization towards the desired objective or away from it. If it looks like the objective will not be achieved, the decision maker can then choose to either strengthen the driving forces, weaken the restraining forces, or abandon or change the objective altogether.²

The following example in figure 1, illustrates an example of the FFA to help decide whether to upgrade a factory with new equipment. The forces against the change are greater than the forces supporting it and thus the decision maker must choose whether to increase the driving forces or weaken the restraining forces in order to accomplish its objectives.

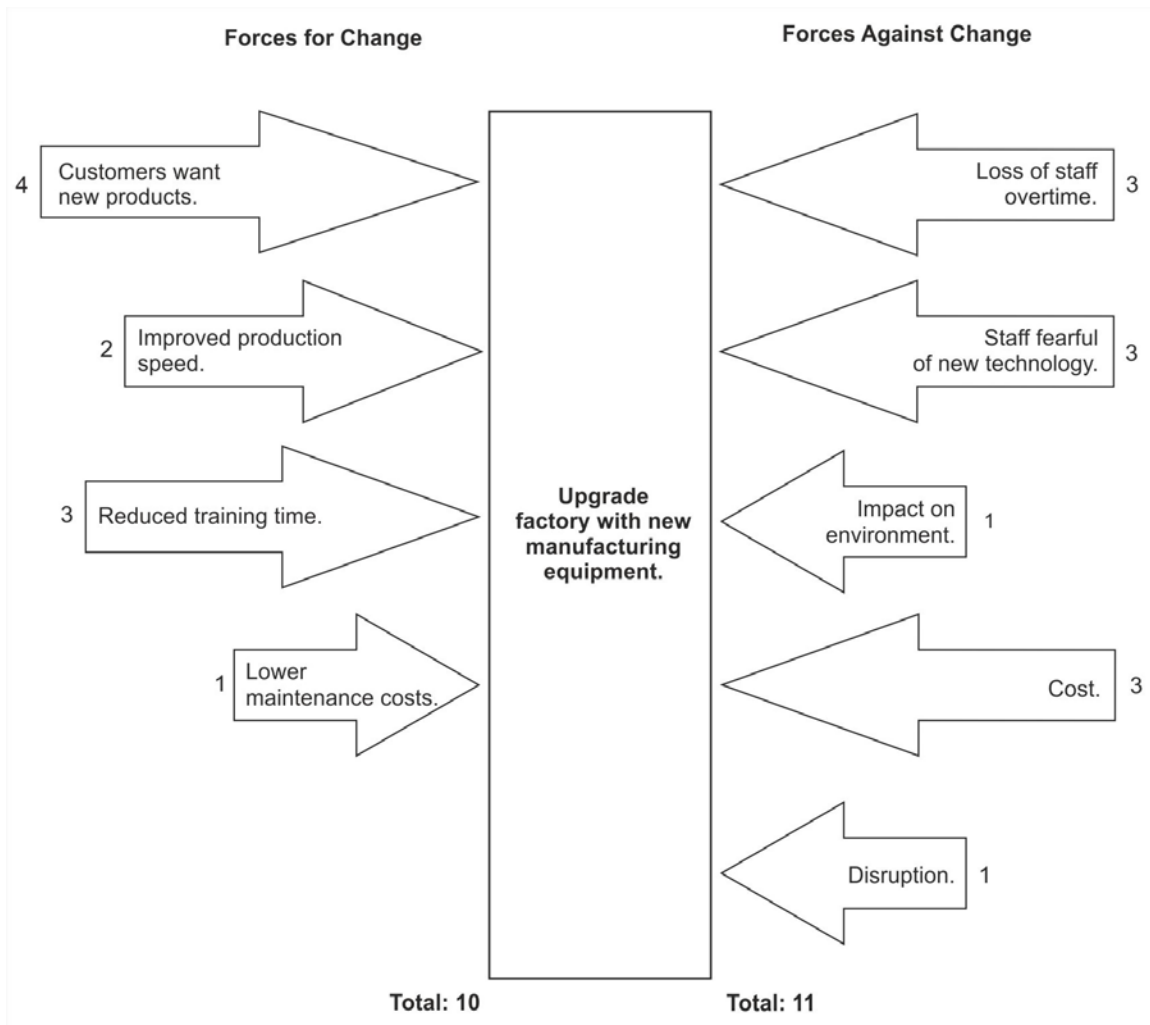


Figure 1. Force Field Analysis Example

Source: Mind Tools, “Force Field Analysis,” http://www.mindtools.com/pages/article/newTED_06.htm (accessed May 7, 2014).

The Competing Values Framework

The Competing Values Framework (CVF) has been identified as one of the most successful models for cultural change in the history of business. Created by Robert E. Quinn and John Rohrbaugh in 1983, the CVF has been studied and tested in leading business schools and corporations and has been credited for improving thousands of

organizations throughout the world.³ The CVF and its associated Organizational Culture Assessment Instrument (OCAI) provide a means of diagnosing the current culture and identifying the desired culture, and also aides in the planning to accomplish the desired cultural changes within an organization.⁴ The military equivalent to the CVF would be the Operational Approach, which identifies the current state, the desired state, and the method of achieving that desired state. The CVF is similar but instead of focusing on military objectives, it focuses on organizational culture.

The basis for the CVF is rooted in the idea that there are two positive tensions in any organization- the tension between Stability and Flexibility, and the tension between External Focus and Internal Focus. Plotting these tensions as X and Y axes allows management to visualize their organization's culture based on the quadrant that is assigned as a result of the OCAI assessment. Each quadrant represents a different culture type- Adhocracy, Market, Clan, and Hierarchy.⁵ Figure 2 provides a summary of the different culture types.

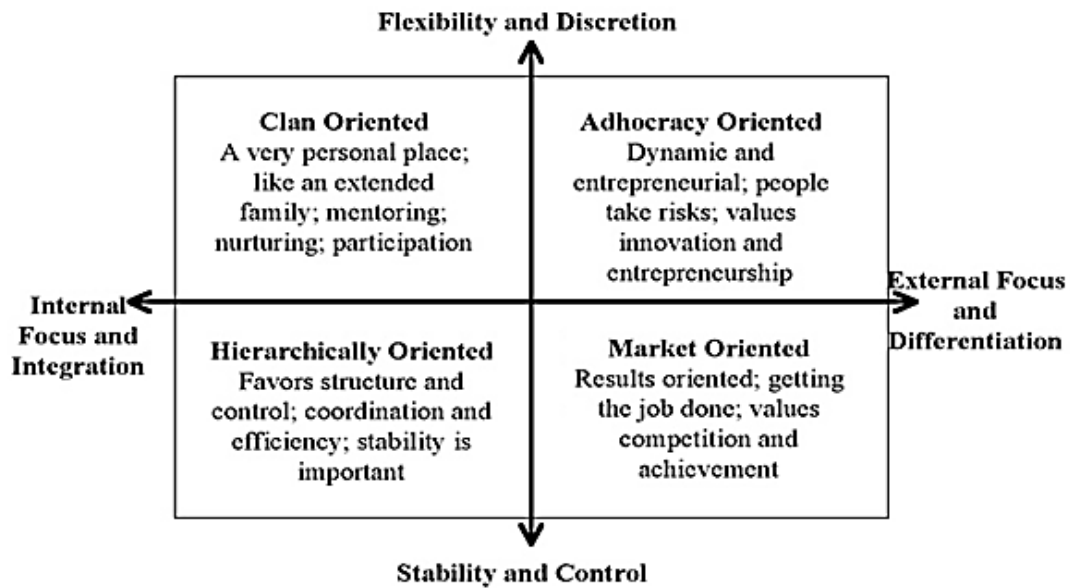


Figure 2. Competing Values Framework

Source: Michelle L. Kaarst-Brown, "Organizational Development and Leadership," *Library Trends* 53, no. 1 (Summer 2004), <http://bibliomining.com/nicholson/ltrendka.htm> (accessed May 7, 2014).

The Four Major Culture Types

1. The Hierarchy (Control) Culture. In this type of culture, "procedures govern what people do. Effective leaders are good coordinators and organizers. Maintaining a smoothly running organization is important. The long-term concerns of the organization are stability, predictability, and efficiency. Formal rules and policies hold the organization together." Examples of organizations with a Hierarchy culture are McDonalds, Ford Motor Company, government agencies, and the military.⁶
2. The Market (Compete) Culture. The term "market" may be misleading as the representation is not necessarily a commercial one but is focused more on

competition. In this culture, the major focus is on productivity, profitability, and the bottom line. Examples of organizations with a Market culture include professional sports teams, real estate companies, and investment banks. This is a results-oriented workplace where the emphasis is on winning.⁷

3. The Clan (Collaborate) Culture. Organizations with this culture believe that the “environment can best be managed through teamwork and employee development . . . and the major task of employers is to empower employees and facilitate their participation, commitment, and loyalty.” Examples of Clan organizations are labor unions, certain religious organizations, and college fraternities and sororities. A Clan organization is held together by loyalty and tradition.⁸

4. The Adhocracy (Create) Culture. An organization with an Adhocracy culture is focused on innovation and creativity to solve problems or create new products. There is no centralized control of power but instead authority and influence flow to the most important project at the time. Effective leadership in this culture is “visionary, innovative, and risk oriented,” and the emphasis is on being out front with the newest knowledge, product, or service. Examples include Google, Apple, and NASA.⁹

Once the culture profile has been created using the OCAI, the following steps can be taken to initiate organizational culture change:

Nine Steps for Culture Change Using the Competing Values Framework

1. Reach consensus regarding the current organizational culture.
2. Reach consensus on the preferred future organizational culture.
3. Determine what the changes will and will not mean.
4. Identify stories illustrating the desired future culture.
5. Identify a strategic action agenda.
6. Identify immediate small wins.
7. Identify leadership implications.
8. Identify metrics, measures, and milestones to maintain accountability.
9. Identify a communication strategy.

Figure 3. Nine Steps for Culture Change Using CVF

Source: Kim S. Cameron and Robert E. Quinn, *Diagnosing and Changing Organizational Culture Based on the Competing Values Framework* (San Francisco: Jossey-Bass, 2011), 102.

The Kotter Model

In 1996, Harvard Business School Professor, John Kotter, published a book titled *Leading Change* that offers a “straightforward, logical, sequential, and effective model for leading organizational change.” His “8-Step Process for Leading Change” is well-documented, researched, and is widely used not only in the civilian sector but also by the Army, who adopted it in the mid-1990s, with General Shinseki later using its principles to lead the Army’s transformation after 9/11.¹⁰ His model is provided in figure 5.

Kotter makes the distinction between leaders and managers and states that leadership is the real engine driving successful change and, regardless of the quality of

people involved, a “managerial mindset” will inevitably fail. “Managers operate in the here and now, and leaders focus on improving for the long term; for example managers oversee procedures and activities, leaders provide the inspiration, vision and purpose.”¹¹

Additionally, Kotter offers eight common errors that leaders make that contribute to their failure in implementing change:

<u>Why Change Fails</u>	
1.	Allowing too much complacency
2.	Failing to create a sufficiently powerful guiding coalition
3.	Underestimating the power of vision
4.	Under-communicating the vision
5.	Permitting obstacles to block the vision
6.	Failing to create short-term wins
7.	Declaring victory too soon
8.	Neglecting to anchor changes firmly in the corporate culture

Figure 4. Why Change Fails

Source: J. P. Kotter, *Leading Change* (Boston MA: Harvard Business School Press, 1996), 16.

Kotter's 8 Step Model for Leading Change

Step 1: Establishing a Sense of Urgency

Help others see the need for change and they will be convinced of the importance of acting immediately.

Step 2: Creating the Guiding Coalition

Assemble a group with enough power to lead the change effort, and encourage the group to work as a team.

Step 3: Developing a Change Vision

Create a vision to help direct the change effort, and develop strategies for achieving that vision.

Step 4: Communicating the Vision for Buy-in

Make sure as many as possible understand and accept the vision and the strategy.

Step 5: Empowering Broad-based Action

Remove obstacles to change, change systems or structures that seriously undermine the vision, and encourage risk-taking and nontraditional ideas, activities, and actions.

Step 6: Generating Short-term Wins

Plan for achievements that can easily be made visible, follow-through with those achievements and recognize and reward employees who were involved.

Step 7: Never Letting Up

Use increased credibility to change systems, structures, and policies that don't fit the vision, also hire, promote, and develop employees who can implement the vision, and finally reinvigorate the process with new projects, themes, and change agents.

Step 8: Incorporating Changes into the Culture

Articulate the connections between the new behaviors and organizational success, and develop the means to ensure leadership development and succession.

Figure 5. Kotter's 8 Step Model for Leading Change

Source: Kotter International, "The 8 Step Process for Leading Change," <http://www.kotterinternational.com/our-principles/changesteps/changesteps> (accessed May 7, 2014).

The Six Levers for Managing Organizational Culture

Dr. David Young is a Professor of Management, Emeritus, at Boston University's School of Management and has over 35 years of experience in the fields of management and executive education. His model for managing organizational culture is taught at universities and used by businesses throughout the world and is well aligned with the

insights of Dr. Edgar Schein, whose framework will be used to analyze the cultures of the different services in chapter 4 of this thesis. While the Kotter model described previously is focused on organizational leadership, Young's Six Cultural Levers focuses on the processes that management can use to either maintain or modify an existing culture. In this regard, Young's model focuses less on vision and more on process alignment to enact cultural change.¹²

Young posits that:

To maintain or change a culture requires addressing some of the fundamental ways that the organization operates. . . . There are six organizational processes—or “cultural levers”—that senior management can use to either maintain or modify an existing culture: (1) strategy formulation, (2) authority and influence, (3) motivation, (4) management control, (5) conflict management, and (6) customer or client management. In some instances, the use of one of these processes as a cultural lever is relatively easy, and in others it is quite complex and difficult. Importantly, however, they all must fit together in such a way that they are mutually reinforcing.¹³

A summary of the six cultural levers follows:

1. Strategy Formulation. There are two broad schools of thought on strategy formulation—Top-Down theorists vs. Coalitionists.
 - a. In a Top-Down process, senior management provides a unified strategic direction based on the environment and the strengths and weaknesses of the organization. This approach to decision making is often referred to as SWOT, or Strengths, Weaknesses, Opportunities, and Threats. While there is an advantage in having a unified direction, this approach can become problematic if the analysis of the environment and the organization is not accurate.

b. A Coalition approach to strategy formulation allows for multiple individual strategies within the organization to exist, and even at times to be in competition with one another. This approach is appropriate for multi-divisional conglomerates or organizations with different programs such as a medical center that specialize in oncology and cardiology.

2. Authority and Influence (A&I). The flow of authority and influence can range from hierarchical (e.g. military) to collegial/flat (e.g. universities). It is important that this lever be properly aligned with the strategy formulation lever. For example, a Hierarchical approach to Authority and Influence would be incompatible with a Coalitionist approach to Strategy formulation. Dr. Young also notes that this is a very difficult lever to change and can encounter much resistance. Interestingly, he notes, “military combat conditions all but dictate that the U.S. Army have a hierarchical culture. As such, an important task for senior management is to determine where it has ‘A&I maneuvering room,’ and to determine its approach accordingly.”

3. Motivation. Motivation can be an effective lever for managing culture. It is important that the motivation methods be considered in relation to the other cultural levers. For example, a good motivational reward for someone working in a Top-Down organization with a Hierarchical A&I structure, e.g. the military, would be promotion in rank, bonuses, and awards, whereas, someone working in a Collegial organization with a Coalitionist approach to strategy

formulation, e.g. a research university, may find peer recognition or increased autonomy more rewarding than monetary compensation.

4. Management Control. This lever consists of four phases- programming, budgeting, measuring, and reporting of both financial and non-financial results. In essence, this lever can be utilized to control the amount of latitude subordinates have in conducting their projects, (e.g. Centralized C2 vs. Mission Command in the military). The degree of Management Control will inevitably vary depending on the amount of oversight senior management wishes to have on the progress of its strategic direction. This lever is effective in influencing culture and can be acted on relatively quickly.
5. Conflict Management. Young states that “Conflict can be either beneficial or detrimental to an organization. Each party brings an important, but usually conflicting, perspective to the table, the resolution of which can lead to improved organizational performance. For a good decision to emerge, however, the conflict must be well managed.” In managing a conflict, there are usually three options available: Direct Confrontation- working it out between employees, Smoothing- involving a third party, and Forcing- the supervisor makes the final decision. It is important to utilize the appropriate Conflict Management option that supports the desired culture. For example, a Forcing method would not be received well in a Collegial organization. Nor would a Direct Confrontation method be necessarily appropriate for a Hierarchical organization that requires strict Management Control over its Strategic

Direction. Conversely, the Conflict Management lever can be utilized to enforce a desired culture. Young provides the following example:

The membership of both permanent committees and ad hoc task forces sends important cultural signals. If senior management combines, say, an equal number of middle managers and assembly line workers on a reengineering task force, it is sending a signal to the organization about both the importance of line workers' opinions and the value it attaches to middle managers' time.¹⁴

In the military, the creation of working groups and planning teams on a Joint staff is an example of using committees to resolve conflict between different groups. Using the above example, having an equal number of representatives from all the services or staff sections would create a culture of inclusiveness.

1. Customer or Client Management. This lever is not applicable to this thesis.¹⁵

Figure 6 illustrates how the six cultural levers are all tied together and how solutions should reinforce one another.

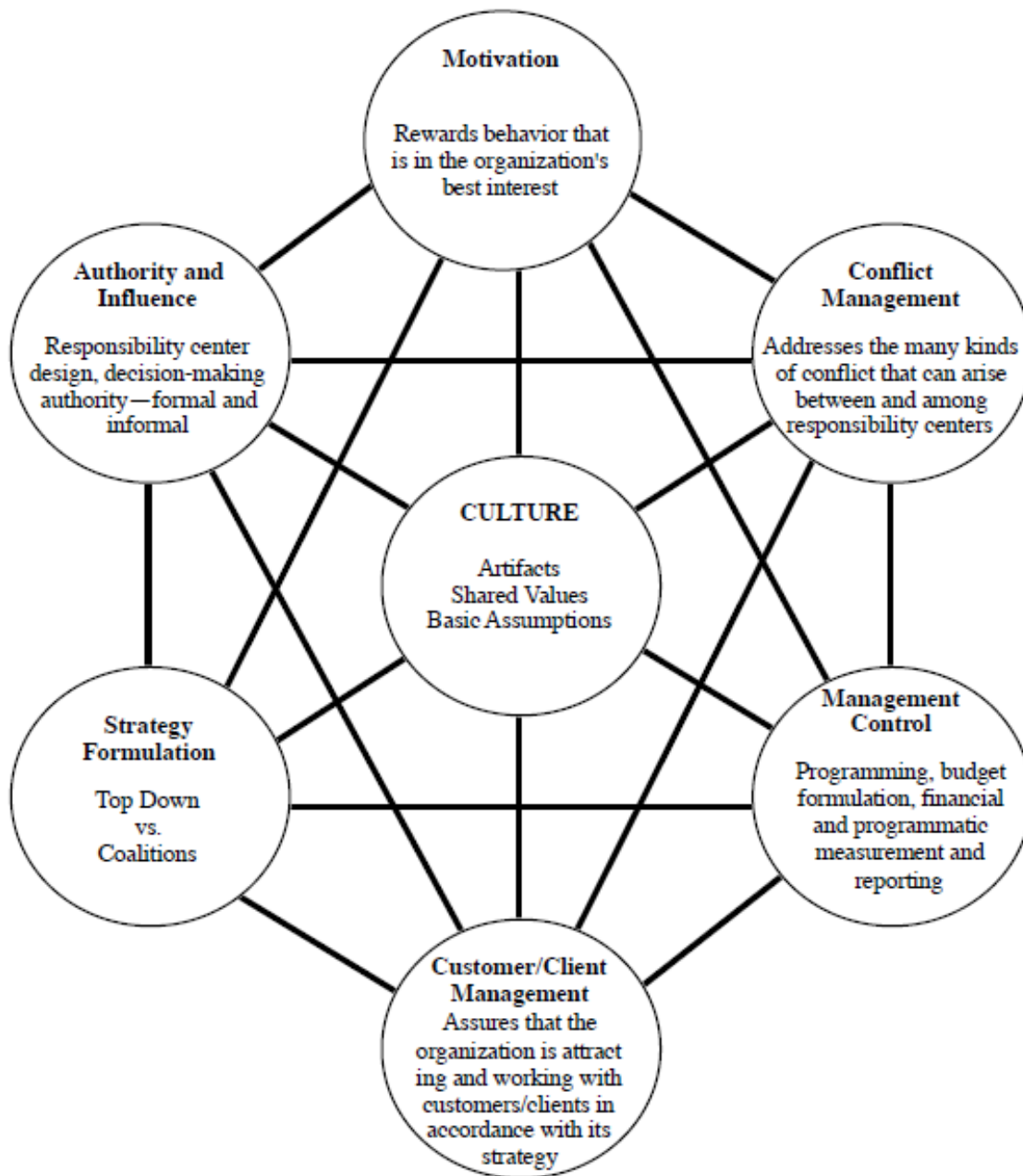


Figure 6. Six Levers for Managing Organizational Culture

Source: David Young, "Managing Organizational Culture," <http://www.davidyoung.org/Resources/Docs/ManagingCulture.pdf> (accessed May 7, 2014).

Culture Planning for Mergers and Acquisitions

This section on culture planning for mergers and acquisitions will provide insight and methods on how Fortune 500 companies address cultural barriers to a successful merger, acquisition, or joint venture. In the corporate world, nearly 75 percent of all mergers fail to achieve their desired financial or strategic objectives. This despite diligent analysis of financial statements and countless hours devoted to organizational and strategic planning.

One need not look further than the failed merger between AOL and Time Warner to see the risks in merging two companies without doing adequate culture planning. What should have been a match made in heaven ended up being a disaster with the two companies eventually separating with a net loss of over \$100 Billion in market capital., making it the “biggest annual corporate loss in history.”¹⁶ The failure of the AOL-Time Warner merger is studied in business schools throughout the world and it is generally accepted that a primary cause of the failed merger was the disparate cultures of the two companies.¹⁷

Mitchell Lee Marks and Philip H. Mirvis, authors of *Joining Forces Making One Plus One Equal Three in Mergers, Acquisitions, and Alliances*, blames the dismal success rate of mergers on the fact that most businesses “rush through the precombination work of strategy setting and due diligence, mishandle the melding of two organizations and their cultures, and neglect to reenlist employees in the postcombination phase and create lasting value from promised synergies.”¹⁸ Marks and Mirvis were dubbed “merger mavens” by Fortune magazine and their book *Joining Forces* was called the “M&A

bible.”¹⁹ Their insights and methods on culture planning for mergers, acquisitions, and alliances will be reviewed below.

Combination Forms

Organizations can combine in many different forms, ranging from simple collaboration to outright absorption. The depth of the combination is influenced by: the amount of willing investment and risk by the participating organizations; the amount of control that is required (or desired); the amount of impact to the organizations after the combination; the level of integration required; and the pain of separation once the combination is no longer required or desirable.²⁰ Figure 7 illustrates the varying forms of combinations and its correlation to the factors just mentioned. A graphic of the military equivalent combination forms are also provided for comparison.

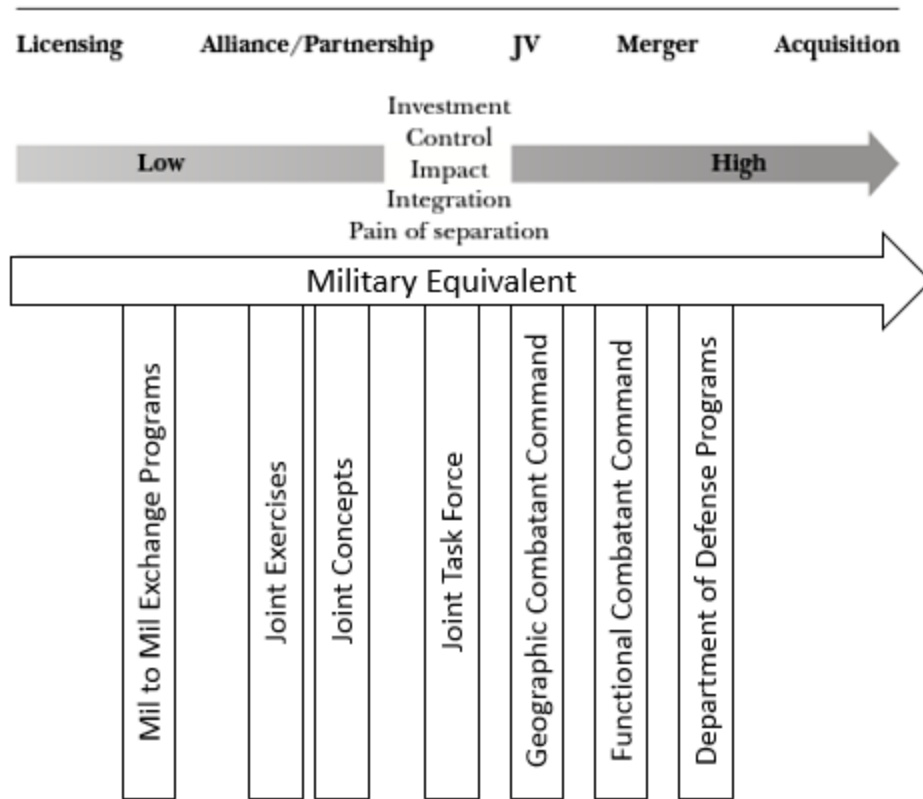


Figure 7. Types of Strategic Combinations

Source: Modified by author from Mitchell Lee Marks and Philip H. Mirvis, *Joining Forces Making One Plus One Equal Three in Mergers, Acquisitions, and Alliances*, 2nd ed. (San Francisco: Jossey-Bass, 2010), 13.

Marks and Mirvis provide the following definitions:

A strategic alliance is a cooperative effort by two or more entities in pursuit of their own strategic objectives. A joint venture (JV) goes further, by establishing a complete and separate formal organization with its own structure, governance, workforce, procedures, policies, and culture—while the predecessor companies still exist. At the far end of the continuum are mergers and acquisitions. A merger usually involves the full combination of two previously separate organizations into a third (new) entity. An acquisition typically is the purchase of one organization for incorporation into the parent firm.²¹

Combining Organizations and Cultures

Just as there are different levels of combination ranging from simple alliances to outright acquisition, there too are different levels of combining cultures. Marks and Mirvis posit that a “business case” needs to be made for combining cultures—“It is very likely that senior executives will see a need for a common and unified culture in some areas of the combination and for more pluralism in others.” The different cultural combination forms vary depending on the amount of cultural change necessary in both the acquiring and acquired companies. The different cultural combination forms are: Absorption, Preservation, Transformation, Reverse Merger, and Best of Both Worlds.²²

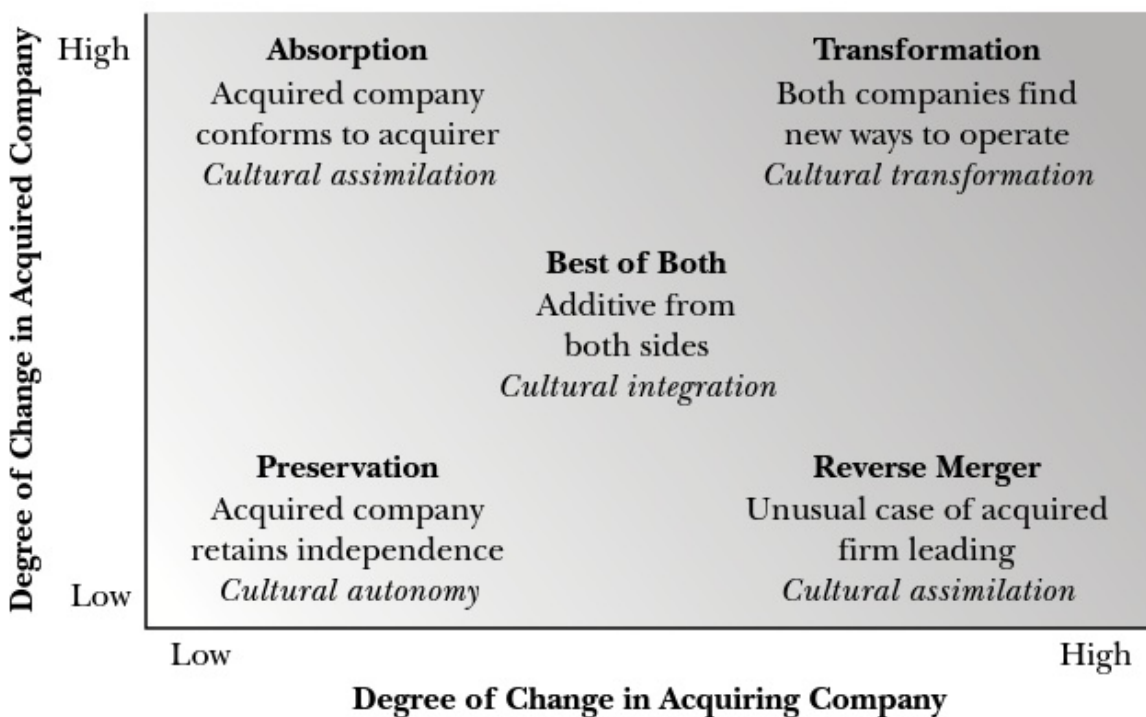


Figure 8. Cultural Combination Forms

Source: Mitchell Lee Marks and Philip H. Mirvis, *Joining Forces Making One Plus One Equal Three in Mergers, Acquisitions, and Alliances*, 2nd ed. (San Francisco: Jossey-Bass, 2010), 15.

Marks and Mirvis offer the following questions to help managers identify the “cultural end states” desired from the combination.

1. Where the lead or parent company’s culture will prevail
2. Where the partner’s cultural autonomy will be honored
3. Where the two sides’ cultures will be blended
4. Where new cultural themes need to be developed through a transformational process²³

By utilizing this process, the combining organizations can pick and choose which aspects of culture to retain, transform, or integrate based on strategic direction, synergies desired, and the level of combination, e.g. alliance vs. merger. In this way, organizations can avoid unnecessary cultural battles while focusing efforts for organizational change in areas that will support the new combination.

Unfreezing, Changing, Refreezing

Once a cultural combination form has been agreed upon, the process for cultural change will need to begin. Marks and Mirvis recommend Lewin’s Change Management Model of “unfreezing, changing, and refreezing.” The process likens culture to an ice cube in that it can be changed into a different shape with a chisel and hammer but not without sacrificing volume. Instead, it recommends melting it down into a liquid, reshaping it, then refreezing it with the new form.²⁴

Lewin's Three Step Process for Change Management:

1. Unfreezing—Strategic and psychological preparation for the impending combination. Unfreeze present behaviors or attitudes with compelling rationale for joining forces along with information and education on the disadvantages of the status quo to unfreeze mindsets.
2. Changing—Delineating the principles that govern the combination, defining the values that will be embodied in the end state, and stating what behaviors will and will not be tolerated as the two firms combine — and then walking the talk!
3. Refreezing- Reinforces and locks desired behaviors or mindsets into the combined organization. This means aligning structures and systems, performance targets and incentives, and action with intentions to support the desired end state and strategic goals.

Figure 9. Lewin's Three-Step Process for Change Management

Source: Mitchell Lee Marks and Philip H. Mirvis, *Joining Forces Making One Plus One Equal Three in Mergers, Acquisitions, and Alliances*, 2nd ed. (San Francisco: Jossey-Bass, 2010), 21.

Appendix F highlights the cultural elements of the Combination Checklist used for combination planning espoused by Marks and Mirvis in their book *Joining Forces*.

The Chaos Imperative

In his book *The Chaos Imperative: How Chance and Disruption Increase Innovation, Effectiveness, and Success*, author Ori Brafman provides a method for harnessing what he terms as “chaos” to overcome barriers in highly structured and hierarchical organizations to foster innovation and cultural change. His insights are highly acclaimed and have been used by many organizations including the US Army to generate and nurture new ideas despite a rigid and hierarchical structure.²⁵ Brafman provides the following narrative on the power of chaos to change an organization (truncated by the author for brevity):

The Church Hires Aristotle

[T]he medieval Church and the modern US Army have a lot in common. Both have hierarchical structures, both operate out of a central headquarters- the Vatican in the former case, the Pentagon in the latter- and both operate on a huge scale. . . . Now imagine the Catholic “corporation” being ravaged by the plague. Prior to the plague (Black Death).. the Church looked askance at ancient knowledge from the Greeks and Romans. . . . The issue was that lines of inquiry and even reality itself were defined by Church doctrine. If you discovered something in the physical world that defied that doctrine, well then, your fact must be wrong. Thus, though it did not intend to, the Church was stifling progress.²⁶

[As a result of the plague], “white space” (a blank canvas or a new beginning) was created by the lack of clergy. Desperate for new priests, the Church brought in men who previously would have been considered unfit for or unworthy of priesthood. . . . These “unusual suspects” (outsiders who are not part of the system), were new recruits to the priesthood who were university graduates who for the most part subscribed to the humanist philosophy (e.g. Aristotle). . . . The humanists and their presence inside the church created ripple effects that would last for centuries and eventually usher in the Renaissance. . . .The Church had undergone a huge cultural shift.²⁷

Similar to the medieval Church prior to their cultural transformation, Brafman posits that in 2003, the US Army was suffering from groupthink, “taking a dogged, American-centric viewpoint and failing to hear alternative voices.”

Brafman states:

Many leaders in the Army and among the civilian ranks of the Department of Defense imagined themselves as the cavalry in an old Hollywood western, riding in to the sound of a bugle to save the day. They convinced themselves that the Iraqis would be waiting with open arms when the United States invaded their country. What was tragic was that there were dissenting voices, but as an institution the army wasn’t able to listen to them.²⁸

Brafman’s theories on Chaos would be utilized by General Dempsey during his tenure as Chief of Staff of the Army to encourage innovative ideas to move through the rigid system of the Army, resulting in the development of the Red Team University.²⁹

In his book, *The Chaos Imperative*, Brafman offers the following method to harness chaos and enable innovation and organizational change:

Steps for Harnessing Chaos

1. **Create Whitespace**—The allocation of unstructured time or unassigned resources to allow for creativity and inspiration.
2. **Invite Unusual Suspects**- Outsiders who are not part of the established order who have the ability to bridge disparate ideas from different organizations.
3. **Plan for Serendipity**- Setting the conditions for serendipity (innovation or inspiration) to occur by encouraging communication and collaboration of diverse groups.³⁰

Figure 10. Steps for Harnessing Chaos

Source: Ori Brafman, The Chaos Imperative: How Chance and Disruption Increase Innovation, Effectiveness, and Success (New York: Crown Business, 2013).

Summary and Conclusion

This chapter provided a review of the literature available to answer the secondary research question—“What methods for dealing with change that are used by civilian organizations can be tailored to address the cultural issues unique to the military?.” The following is a summary of the models reviewed in this chapter.

The Force Field Analysis is a popular decision making tool that does not specifically address organizational culture or methods to change it, and should be used in conjunction with any of the other methods that are more suited for addressing cultural change. The Competing Values Framework is a popular and successful tool in business but is limited in its ability to diagnose organizational culture in a non-business environment due to the static nature of its OCAI instrument. It would be difficult to tailor the OCAI to focus on the subtle aspects of military culture. The Kotter model is useful for implementing a vision and leading organizational change but neglects to mention the

systems, processes, and procedures that can be managed to align an organization's culture with its desired strategy. Young's Six Cultural Levers provide a more process oriented approach to cultural change. While Young's method is effective in aligning an organization's culture to its strategy, it does not adequately address (nor do any of the previous models) dealing with cultural friction amongst multiple independent organizations (e.g. the military services).

The cultural planning model developed by Marks and Mirvis for mergers and acquisitions takes a balanced approach to organizational change in that it combines elements of cultural analysis as seen in the CVF, elements of organizational vision and leadership espoused by Kotter, and elements of the more process oriented method of Young's Six Cultural Levers. Most significantly, it acknowledges the importance of cultural planning between combining organizations to enhance probability of success in achieving desired strategic and organizational objectives.

Ori Brafman's "chaos" method for enabling organizational change has been proven particularly effective for large organizations with rigid hierarchical structures and may be a useful tool in overcoming institutional inertia, which will be analyzed further in chapter 4. Figure 11 lists the change models categorized by their focus. The following chapter will provide an outline of the methodology used for this study.

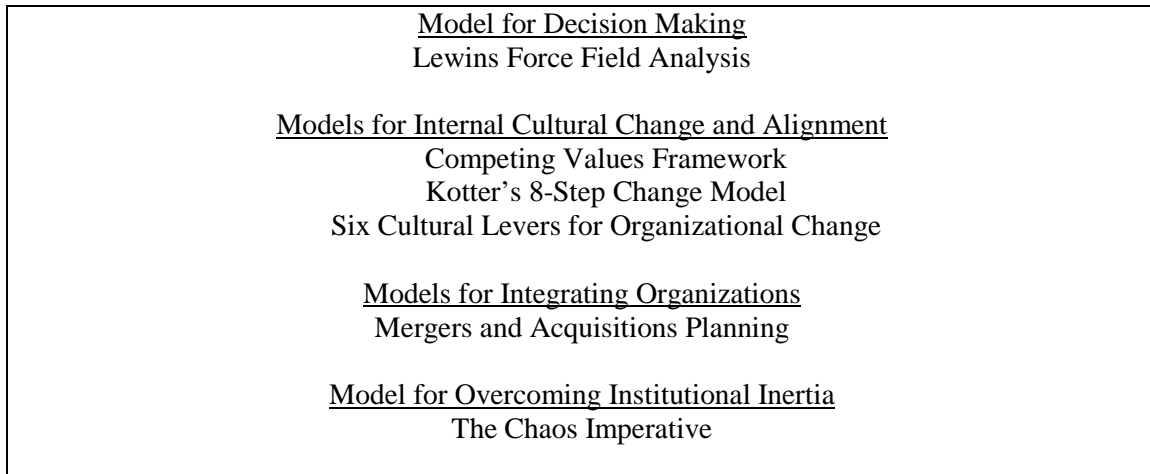


Figure 11. List of Change Models

Source: Created by author.

¹“Force Field Analysis - Analyzing the Pressures For and Against Change,” http://www.mindtools.com/pages/article/newTED_06.htm (accessed April 1, 2014).

²Ibid.

³“The Competing Values Framework,” <http://competingvalues.com/competing-values.com/wp-content/uploads/2009/07/The-Competing-Values-Framework-An-Introduction.pdf> (accessed April 23, 2014).

⁴Kim S. Cameron and Robert E. Quinn, *Diagnosing and Changing Organizational Culture Based on the Competing Values Framework* (San Francisco: Jossey-Bass, 2011), 95-133.

⁵Ibid., 39.

⁶Ibid., 42-51.

⁷Ibid.

⁸Ibid.

⁹Ibid.

¹⁰Bill Miller and Ken Turner, “L103RB: Leading Organizational Change: A Leader’s Role,” *Leading Organizations in Change*, ed. Department of Command and Leadership, Command and General Staff College (Fort Leavenworth, KS: Government Printing Office, August 2013).

¹¹*Ibid.*

¹²David W. Young, “Managing Organizational Culture,” <http://www.davidyoung.org/Resources/Docs/ManagingCulture.pdf> (accessed April 22, 2014).

¹³*Ibid.*

¹⁴*Ibid.*

¹⁵*Ibid.*

¹⁶Martin Peers and Julia Angwin, “AOL Posts \$98.7 Billion Loss on New Goodwill Write-Down,” *Wall Street Journal*, <http://online.wsj.com/news/articles/SB1043702683178461304> (accessed April 24, 2014).

¹⁷Bill Flook, “30 Years: AOL Buys Time Warner, but Deal Later Implodes,” <http://www.bizjournals.com/washington/print-edition/2012/07/20/30-years-aol-buys-time-warner-but.html?page=all> (accessed April 24, 2014).

¹⁸Mitchell Lee Marks and Philip H. Mirvis, *Joining Forces Making One Plus One Equal Three in Mergers, Acquisitions, and Alliances*, 2nd ed. (San Francisco: Jossey-Bass, 2010), vii.

¹⁹Marks and Mirvis, x.

²⁰*Ibid.*, 13.

²¹*Ibid.*, 12.

²²*Ibid.*, 14-15.

²³*Ibid.*

²⁴*Ibid.*, 21.

²⁵Ori Brafman, *The Chaos Imperative: How Chance and Disruption Increase Innovation, Effectiveness, and Success* (New York: Crown Business, 2013).

²⁶*Ibid.*, 11.

²⁷*Ibid.*, 16.

²⁸Ibid., 140.

²⁹Ibid., 146.

³⁰Ibid., 31-34.

CHAPTER 3

METHODOLOGY

Introduction

The CCJO lays out a vision for the individual services to embrace Joint integration and collaboration despite clear cultural barriers that may make such cooperation difficult. Recognizing the primary service barriers to Joint Force 2020 and identifying solutions to overcoming them is critical to the successful implementation of the chairman's capstone concept for Joint operations. This chapter outlines the steps taken by the author to obtain the information needed to address the primary and secondary research questions. Because no interviews or surveys were conducted, items normally included, i.e. criteria for selection, sampling methods, and analysis will be omitted from this chapter.

Research Methodology

Research was conducted through an abductive process where existing literature was studied in the framework of the primary and secondary research questions listed in chapter 1. This was primarily a qualitative study. Due to time limitations and because of the wealth of literature on the topic, no interviews or surveys were conducted. However, case studies were incorporated to help articulate the main points of the study. Finally, a recommended solution is provided in chapter 5 based on the analysis in chapter 4 of the primary and secondary research questions.

Summary and Conclusion

This chapter provided a brief overview of the research methodology used in this study. The following chapter will provide a detailed analysis of the research in conjunction with a primer detailing the organizational culture of the different military services and their approach to key joint concepts.

CHAPTER 4

ANALYSIS

Introduction

In September of 2012, the Chairman of the Joint Chiefs of Staff released A *Capstone Concept for Joint Operations: Joint Force 2020* (CCJO) which lays out a vision for a “globally postured Joint Force to quickly combine capabilities with itself and mission partners across domains, echelons, geographic boundaries, and organizational affiliations.” This is accomplished through what the Chairman refers to as “Globally Integrated Operations” (GIO).

Three elements of the GIO–Mission Command, Flexibility in Establishing Joint Forces, and Cross-Domain Synergy–rely heavily on the individual services to embrace Joint integration and collaboration despite clear cultural barriers that may make such cooperation difficult. History is replete with examples of service barriers that have impeded collaboration and innovation within the Joint community. If Joint Force 2020 is going to be the solution to meet the future threat in a challenging fiscal environment then it is important to recognize and identify the primary service barriers to change and find solutions to overcome them.

This chapter will provide an analysis of the research that was completed for this thesis. The first section will provide the findings of the research for the primary research question–“What are the primary barriers within the military services that might impede Mission Command, Flexibility in establishing Joint forces and Cross-domain synergy?” It begins with a brief overview on Ed Schein’s definition of organizational culture, then

uses his framework to provide a cultural primer of the individual services in an attempt to lay the foundation for identifying the cultural barriers that might impede Joint integration.

The next section analyzes the services' views on key Joint concepts such as Mission Command, Planning, and the Role of Airpower, in an attempt to demonstrate how culture can influence service approaches to Joint concepts. Then, a case study on Air-Sea Battle is presented to demonstrate how new Joint concepts can have mixed reactions from the individual services due to their culture. Next, the primary service barriers to Joint Force 2020 are identified. The final section answers the secondary research question—"What methods for dealing with change that are used by civilian organizations can be tailored to address the cultural issues unique to the military?"

Presentation of Findings

Primary Research Question

What are the primary barriers within the military services that might impede Mission Command, Flexibility in Establishing Joint Forces and Cross-domain Synergy?

Cultural Primer of the Different Services

Understanding Culture

Edgar Schein's book *Organizational Culture and Leadership* is considered an authoritative work on the topic of organizational culture. Schein's insights and framework will be used to analyze the organizational culture of the different services and provide a consolidated primer that lays the foundation for identifying the barriers to joint force collaboration.

[Organizational culture can be defined as] a pattern of shared basic assumptions learned by a group as it solved its problems of external adaptation and internal

integration, which 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.¹

Schein posits there are three levels of culture which help to analyze and understand an organization's culture: Artifacts; Espoused Beliefs and Values; and Basic Underlying Assumptions. Artifacts are observable representations of culture but are difficult to decipher. Espoused beliefs and values are rationalizations or aspirations and may not be in sync with the actual culture. The most important level of culture to understand is the basic underlying assumptions because therein lies the essence of culture. Through the basic underlying assumptions, culture will manifest itself into observable artifacts and shared espoused beliefs and values.² (See figure 12)

The Three Levels of Culture	
<p style="text-align: center;"><u>Level I—Artifacts</u></p> <ul style="list-style-type: none"> • Visible and feel-able structures and processes • Observed behavior • Difficult to decipher 	
<p style="text-align: center;"><u>Level II - Espoused Beliefs and Values</u></p> <ul style="list-style-type: none"> • Ideals, goals, values, aspirations • Ideologies • Rationalizations • May or may not be congruent with behavior and other artifacts 	
<p style="text-align: center;"><u>Level III - Basic Underlying Assumptions</u></p> <ul style="list-style-type: none"> • Unconscious, taken - for - granted beliefs and values • Determine behavior, perception, thought, and feeling 	

Figure 12. The Three Levels of Culture

Source: Edgar H. Schein, *Organizational Culture and Leadership*, 4th ed. (San Francisco: Jossey-Bass; 2010), 24.

Culture is an abstract and powerful force that is apparent at the ethnic and national levels but can also be analyzed to help explain the internal and external dynamics of an organization. These organizational dynamics can be quite puzzling or frustrating to an outsider seeking collaboration, or a leader seeking organizational change from within. Inexplicably, individuals and groups may continue to behave in obviously ineffective ways, often threatening the very survival of the organization. For example, groups may seem more interested in fighting with each other than accomplishing a mission. Conflict may occur when partnering with external groups that have different cultures because the level of misunderstandings and miscommunication can be quite high. Resistance to change can be encountered if the proposed changes are not aligned with established culture.³

However, culture can also be a positive force that reinforces key aspects of an organization and is central to defining its purpose while providing a common identity for its members.⁴ The military services all have strong, unique cultures. These cultural distinctions breed different strategies, doctrines, and preferences for organization, operations and planning.⁵ Even the protocol on when it is appropriate to salute is different between the services. Therefore it is necessary when developing a new joint force concept to not only understand the importance and influence of culture but to understand the cultural differences between the military services as well. This can only help to promote the synergy and harmony necessary to set conditions for joint force success.⁶

Service Cultures

Carl H. Builder, in his book *The Masks of War: American Military Styles in Strategy and Analysis*, provides insight into the cultural identities of the different services and how they affect service behavior. Even while his insights, 25 years after publication, remain somewhat valid, they will be augmented from other sources in order to ensure the completeness of any analysis of service culture. The author has chosen not to include the Coast Guard in this analysis because of its normal role under the Department of Homeland Security precludes its membership on the Joint Chiefs of Staff and allocation of DOD budget dollars; also during times of war or when directed by the President, the Coast Guard is aligned with the Navy.

The Army

Builder States:

The Army sees itself, ultimately, as the essential artisans of war, still divided into their traditional combat arms—the infantry, artillery, and cavalry (armor). . . . It takes pride in being the keeper of the essential skills of war that must be infused into the citizenry when they are called upon to fight. . . . It is about keeping itself prepared to meet the varied demands the American people have historically asked of it, but especially prepared to forge America’s citizenry into an expeditionary force to defeat America’s enemies overseas. And in this latter role, the Army accepts (with understandable unease) its utter dependence upon its sister services for air and sea transport and firepower.⁷

Artifacts

While artifacts are by definition difficult to decipher, one can discern from them based on some observation and analysis what the Army represents and what is important to the Army as an organization. For example, the Department of the Army emblem is filled with symbolism. Its armor represents strength and defense (also represented in the current Army Logo—“Army Strong”);⁸ the sword, musket, canon, and mortar represent

the combined arms with which it fights; the drum represents the intent to serve the nation; and the cap of liberty along with the motto “this we’ll defend” symbolize the Army’s constant readiness to defend the nation.⁹ By studying the uniforms, one can see that the American flag appears backwards on the ACU. This signifies the soldier’s dedication to the mission and never accepting defeat—as the soldier moves forward the stars point towards honor.¹⁰ Additionally, combat deployments are important to the Army. While the unit patch shows the soldier’s current unit, the combat patch (Shoulder Sleeve Insignia—Former Wartime Service) may be worn by individuals who were members of an Army unit during specified wartime operations.¹¹ And the number of stripes on the ASU signify service in an overseas combat zone in six month increments.¹² The branch identification represents the importance of combined arms, and shows if the soldier is affiliated with Armor, Infantry, Field Artillery, Signal, Intel, etc. The blue pants of the ASU signify the lineage from the US Armies of the Revolutionary through the US Civil Wars.

Organizationally, the Army is a deep pyramid organization with multiple echelons of units that are controlled through a concept called “mission command,” discussed later in this chapter. Additionally, the Army is a matrix organization with warfighting functions (movement and maneuver, intelligence, fires, sustainment, command and control, and protection) synchronized with staff functions (Admin, Ops, Plans, etc.). This is done in an effort to avoid working in stove-pipes/silos (disconnected compartments). A list of some additional Level I—Artifacts are represented in Appendix A1.

Espoused Beliefs and Values

As stated earlier, Espoused Beliefs and Values are rationalizations or aspirations which may or may not be in sync with the actual culture.¹³ As a technique to provide

clarity to the reader, this primer will group these beliefs and values into two categories—(1) Who they Are and (2) What they Do.

Who they Are

US Army Chief of Staff, Gen. Odierno stated in the 2012, “The United States Army remains the most agile, adaptable and capable force in the world. Ours is an Army that reflects America’s diversity and represents the time-honored values that built our Nation—hard work, duty, selflessness, determination, honor and compassion.”¹⁴

The Army espouses itself to be a values-based organization.¹⁵ The official Army values are: Loyalty, Duty, Respect, Selfless Service, Honor, Integrity, and Personal Courage, which form the acronym LDRSHIP. Appendix A2 lists additional beliefs and values espoused by the Army.

What they Do

As seen in the excerpts from Army doctrine below, the Army holds two fundamental beliefs that highlight their perceived position relative to the rest of the joint force—the preeminence of the land domain in which they operate, and the ability to dominate that domain when compared to any other land force in the world. As case studies will highlight later in this chapter, these are important assertions since they can be sources of friction when working with the other services. In short, the Army believes wars are won on the ground and the US Army is the force most capable of winning those wars.

From Army Doctrine (ADP 1):

The land domain is the most complex of the domains, because it addresses humanity—its cultures, ethnicities, religions, and politics. War begins and ends

based upon how it affects the land domain. Air, maritime, space, and cybernetic power affect the land domain indirectly; landpower is usually the arbiter of victory. The Army provides the United States with the landpower to prevent, shape, and win in the land domain.¹⁶

No major conflict has ever been won without boots on the ground. Strategic change rarely stems from a single, rapid strike, and swift and victorious campaigns have been the exception in history.¹⁷

Appendix A3 provides a summary of what the Army views are its key competencies.

Basic Underlying Assumptions

Soldiers First

The oldest of the services, the Army feels it has a “social responsibility to the people of the United States of America to fight and win the nations wars and to preserve and protect the American way of life.”¹⁸ With the growing and shrinking with each war, the Army expresses great concern over the active-duty end-strength it has to fulfill that social contract.¹⁹ Currently the Army is undergoing a major downsizing effort following the drawdown of two wars in Iraq and Afghanistan. From a high of 570,000 troops in 2012 to a forecast of 490,000 by 2017 with some estimates going below 420,000, the reduction in force poses a concern for a service that has traditionally focused more on “equipping the man, than manning the equipment,” as the other services do.²⁰

Despite recent efforts to develop new technologies like the Future Combat Vehicle and more capable Ballistic Missile Defense Systems, the soldier (not the equipment) will likely remain the most important asset to the Army.²¹ This focus on people rather than equipment gives the Army flexibility in developing new approaches to future battles. Unlike the Navy, who is tied to their investments in ships and aircraft, or the Air Force, whose strategy depends on their fleet of bombers, fighters and tankers, the

Army is capable of growing and shrinking quickly based on demand and making major organizational changes during inter-war periods and has done so in the past,²² the most recent example was the increase in modular Brigade Combat Teams to fight the wars in Iraq and Afghanistan.²³

The Army is a Team Player and a Joint Leader

Due to the nature of its organizational structure, the Army focuses heavily on coordination and interdependence between units. As mission orders are trickled down from the highest levels of a corps or division to the lower brigades and battalions, commanders within those units know their place in the big fight. This practice of knowing your place in the overall mission helps develop Army officers who are successful on a joint team because they can define their place and act accordingly.²⁴

Additionally, it is evident when studying the joint arena that many of the artifacts originated from the Army. Similarities abound from the importance of doctrine, near-identical warfighting functions, similar planning processes, and how the General Staff concept was incorporated into the joint level and even made its way into the sister services. These are all evidence that the Army is a Joint leader, with a common anecdote heard among sister services being, “How do you spell Joint? A-R-M-Y.”

Tactics before Strategy

Historically, the Army has not focused on developing a strategic theory like the other services have. This is explained in Admiral J.C. Wylie’s book *Military Strategy*, where he cites three factors that explain the difference. Builder summarizes as follows:

In sum, the Army does not have a strategic theory as do the Air Force and Navy because its circumstances—its lack of control over terrain, engagement, and supporting resources—deny it the freedom to define war on its own terms. . . . For

the Army, war will always be on terms chosen by others- partly by the nation's enemies, partly by the nation's leadership-terms that are never satisfactory or welcome, but always to be met with a sense of duty, honor and courage.²⁵

This lack of control causes the Army to be more concerned with the operational and tactical levels of war than the strategic. A soldier's focus then, is on the destruction of the enemy while overcoming the challenges of terrain and other mission variables. This tactical mindset is evident in the way it approaches support from the other services, as illustrated in the quote below.²⁶

[To a soldier], air and naval forces exist primarily to transport the soldier to the scene of action and support him after he gets there. The soldier views the enemy army as the prime focal point of war, and all else should properly be subordinate. The soldier is impatient with the navy when the navy finds tasks that might interfere with taking the soldier where he wants to go, where the enemy army is, and keeping his supplies coming steadily. He is impatient with the airman who wants to put a machine tool factory out of business; he wants the airman to work on the enemy tank right across the valley from him.²⁷

Recently, there has been evidence that the Army may be putting forth more of an effort in the strategy arena. With the wars in Iraq and Afghanistan winding down, and the fiscal environment forcing difficult decisions on troop levels and structure, the Army leadership has unveiled new plans to move to Regionally Aligned Forces in order to align with the US strategic pivot towards Asia.²⁸ Additionally, the Army Chief of Staff, along with his counterparts in the Marine Corps and Special Operations Command (SOCOM), released a Strategic Landpower Whitepaper in October, 2013 that emphasized increased attention to the Human Domain in protecting and advancing US national interests.²⁹ These new concepts of Regionally Aligned Forces and Strategic Landpower, in addition to revising its doctrine to recognize the Army's role as part of a larger Joint and Interagency conduct of unified action, is evidence that the Army is changing its culture but it is a transformation which is still ongoing.

The Navy

Builder States:

The Navy, more than any of the other services and over anything else, is an institution. That institution is marked by two strong senses of itself: its independence and stature. . . . The Navy's stature as an independent institution is on a level with that of the U.S. government (which the Navy must sometimes suffer) . . . [The Navy] is the supranational institution that has inherited the British Navy's throne to naval supremacy. . . . It is about preserving and wielding sea power as the most important and flexible kind of military power for America as a maritime nation. The means to those ends are the institution and its traditions, both of which provide for a permanence beyond the people who serve them.³⁰

Artifacts

A brief analysis of the Navy artifacts reveals what is important to them as an organization. The Department of the Navy emblem shows an eagle symbolizing its affiliation with the United States. Its wings are spread with one foot on land and the other on an anchor symbolizing the Navy's ability to project power ashore. The ship with its sails full of wind symbolize Seapower and the Navy's proud heritage and tradition. The anchor itself serves as a symbol of strength and stability in rough waters. Notably, the anchor is a symbol that is utilized numerous times in the Navy from the officer's crest, to the naval aviator's wings, to the rank of the chief petty officer and midshipman.³¹

Another common Navy symbol is the Trident. Most likely following naval tradition and its affinity for Greek and Roman mythology, the Trident represents the weapon of King Neptune or Poseidon (God of the Sea), and in this manner symbolizes for the Navy, Seapower. The Trident can be found on the Navy S.E.A.L (Sea, Air, Land) insignia; is a type of naval nuclear ballistic missile; is found on the crest of the US Naval Academy; and the Command-Ashore pin.

The Navy has the most uniforms of any service (At least nine varieties for male officers alone). When comparing the uniforms between the Navy and that of any other service, one can clearly discern the Navy's value for stature and independence. The uniqueness of the blue Navy Working Uniform for example, when compared to the tan, grey, and green colors of the Army and Air Force is a clear reminder of the Navy's stature and independence, even in a Joint environment.

Independence is even embraced organizationally. Unlike the Army whose units are in a deep pyramid structure with multiple echelons, the Navy's ships and units are relatively independent. While a carrier strike group may deploy together, often its subordinate ships will break off to conduct separate missions. Ships are designated by type and number in the series and are also assigned a name, usually a former president, admiral, medal-of-honor recipient, a city/state, or famous battle, e.g. USS Eisenhower, CVN-69. Additional Navy artifacts can be seen in Appendix B1.

Espoused Beliefs and Values

Who they Are

The Navy's values are represented in Appendix B2. Most notably, the Navy's core values of "Honor, Courage, and Commitment" are the same as the Marine Corps, signifying their shared heritage and continued partnership. The "Sailing Directions" released by the Chief of Naval Operations, ADM Johnathan Greenert in 2011 reflect the Navy's priorities to place "Warfighting first, Operate Forward, and Be Ready."

What they Do

The Navy believes itself to be America's first line of defense. This can be attributed to its "flexibility, sustainability, its ability to deploy autonomously, and to

retract without political liability.”³² Unlike the other services, the Navy strives to dominate, not just on the sea but in all domains.³³ While its primary mission is to defend the United States, it best accomplishes this task by being forward deployed and ready to project power at a moment’s notice.³⁴ This is illustrated in the quotes from naval doctrine and the CNO’s Sailing Directions below:

From Naval Doctrine (NDP 1):

To carry out our naval roles, we must be ready at all times to conduct prompt and sustained combat operations — to fight and win in all domains. Defending the United States and controlling its homeland approaches are the first requirements. Gaining and maintaining control of the sea and establishing forward sea lines of communications are the next priorities. As we operate in the maritime domain, naval forces provide military power for projection against tactical, operational, and strategic targets. In both peace and war, we frequently carry out our roles through campaigns.³⁵

From the Chief of Naval Operations, ADM Greenert:

Deter aggression and, if deterrence fails, win our Nation’s wars. Employ the global reach and persistent presence of forward-stationed and rotational forces to secure the Nation from direct attack, assure Joint operational access and retain global freedom of action. With global partners, protect the maritime freedom that is the basis for global prosperity. Foster and sustain cooperative relationships with an expanding set of allies and international partners to enhance global security.³⁶

A comprehensive list of US Navy missions is provided in Appendix B3.

Basic Underlying Assumptions

Dedication to Tradition

Born in the wake of the British Navy and all its rich traditions, the US Navy continues to hold reverence for tradition, not just in pomp or display but in every aspect of what it does. In a changing or uncertain environment, the Navy looks to tradition to keep it safe. Premier among Navy traditions is the concept of independent command at sea. It is described by Builder as a “godlike responsibility unlike that afforded to

commanding officers in the other services. Until the advent of telecommunications, a ship “over the horizon” was a world unto itself, with its captain absolutely responsible for every soul and consequence that fell under his command.”³⁷

Independence and Stature

Much like the sailor’s esteem for independent command at sea, the Navy values its own independence in carrying out its mission. Builder states that, “The Navy, more than any other institution is marked by two strong senses of itself: its independence and stature.”³⁸ This can be supported by the remarks made by Air Force General David C. Jones, 9th Chairman of the Joint Chiefs of Staff below from a New York Times article he wrote in 1982:

The Department of the Navy is the most strategically independent of the services—it has its own army, navy and air force. It is least dependent on others. It would prefer to be given a mission, retain complete control over all assets, and be left alone.³⁹

However, the Navy has recently ceded some of its independence and come to terms with the fact that future operations will be conducted in a Joint manner. This is most evident in its integration with the Air Force in the recent wars in Iraq and Afghanistan where Naval Aviation assets were tactically controlled (TACON) to the Air Force led Joint Force Air Component Commander (JFACC).⁴⁰ Additionally, organizational changes have been made to better integrate with Joint forces, including the creation of the Maritime Headquarters (MHQ) and Maritime Operations Center (MOC) concepts which mirror the Air Force (A-Staff/AOC) and Army’s (G-Staff/TOC) operational constructs.

The Number of Ships is Important

The Navy more than any other service has been the most concerned about its size, which it measures in the number of aircraft carriers, ships and submarines, and air wings. Its concern is partly justified if one considers the long lead times required to produce a ship and the operational impacts being a ship short would pose on the deployment schedules of an expeditionary force.⁴¹

Concepts are More Useful than Doctrine

For the Navy, concepts are more useful than doctrine. There is flexibility in a concept that is not inherent in doctrine. This desire for flexibility can be explained by the nature of the maritime environment - featureless and uncontrollable. There are no flanks, rears, or forward edges of the battle area and the most difficult problem is finding the adversary while preventing them from finding you.⁴²

Naval strategist Dr. Roger W. Barnett explains it this way:

Concepts and doctrine tend to be enemies. Concepts are undefined, not clearly bounded, changing and changeable; doctrine is defined, bounded, difficult to change, and relatively inflexible. Admiral Chester Nimitz had it just right: he considered doctrine as a reminder, sort of a checklist to ensure nothing is forgotten or overlooked.⁴³

This need to be adaptable and flexible in an ever changing environment is a key basic underlying assumption which influences the way the Navy approaches its tasks.

This is not to say that the Navy is undisciplined or lacks procedures. Naval instructions and standard operating procedures (SOPs) are only ignored at the sailor's peril. This checklist mentality (as mentioned in the Barnett quote above) and commitment to standardization are hallmarks of the professional culture of the Navy. This is evident in all the communities but especially so in the aviation and submarine communities where

not only are their tasks driven by checklists, the verbal challenges and responses are scripted as if they were lines to a play.

Obsessed with Tactics and Technology

According to U.S. Naval War College professor, Milan Vego:

The Navy today is overly focused on the tactical employment of its combat forces, in its doctrine and practice. . . . The Navy's over-reliance on technology is also one of the main reasons for its focus on the tactics of employment of platforms, weapons/sensors and combat arms. Moreover, the Navy grossly neglects tactics for employing several naval combat arms or combined arms tactics. Among numerous naval tactical publications, there is not a single one that explains the employment of surface forces, submarines, naval aircraft and combat arms of other services in combination. Another serious problem is that the Navy still lacks a doctrine for the operational level of war at sea. This lack of a broader operational framework greatly complicates writing subordinate tactical doctrinal publications.⁴⁴

The roots of the Navy's tactical focus stems from the teachings of Alfred Thayer Mahan, an influential theoretician from the late 19th century who emphasized the importance of fighting the decisive battle and the importance of naval tactics on winning such battles. While the development of the aircraft carrier and naval aviation has limited ship-on-ship battles at sea since World War II, the navy's tactical focus has carried over to its employment of strike warfare, mainly due to new capabilities like Network Centric Operations and long range precision weapons, i.e. cruise missiles. Vego argues that this type of focus on tactics while neglecting operational art will invariably lead to an attrition warfare approach not only at the tactical level, but also at the operational and strategic levels of war.⁴⁵

Much like the Air Force, the Navy embraces new technology to give it a competitive advantage over its peers. While the Navy core missions have changed little over its history, the ways and means of accomplishing these missions have undergone

several evolutions and revolutions as a direct result of technology. Past examples of such technology include the steam engine, submarines, carrier and land based naval aviation, nuclear power and weapons, radar, sonar, gas turbine engines, Aegis weapons systems, SPY 1 radar and Network Centric Warfare.

For the future, the Navy is developing a vision called Seapower 21. The basic idea behind this vision is a highly integrated and networked force capable of more efficient and effective offensive, defensive, and logistical capabilities. The principle driver behind this vision will be new technology like: A new aircraft carrier class with an Electro-Magnetic Launch System (EMALS), new ship classes like the Littoral Combat Ship (LCS) and the Zumwalt Class DD-1000 destroyer, the F-35C Joint Strike Fighter (Navy's first stealth fighter), the P-8A Multi-mission Maritime Aircraft, carrier based unmanned aircraft (UAS), unmanned underwater vehicles (UUV), electro-magnetic railguns, a solid state laser weapons system, and FORCENet's use of the Global Information Grid (GIG).⁴⁶

The Marines

The sometimes tumultuous relationship with both the Army and the Navy, while commonly fighting side-by-side with both of them, have produced a unique Marine Corps culture. The Marines have learned much from their sister services and have adopted bits and pieces of both naval and [Army] cultures along the way. Marines fight like soldiers, talk like sailors, and think like both. They are "soldiers from the sea" who recognize no artificial lines in the battlespace between sea, land, and air. Because of this, Marines considered themselves joint long before "jointness" came into vogue.⁴⁷

Artifacts

An analysis of the Marine Corps artifacts reveal the organization's purpose and direction. The emblem showcases the Eagle, Globe, and Anchor which is the primary

icon of the Marine Corps. The eagle represents the proud nation which they defend, and perched on top of the globe it has the whole world within its reach. The anchor represents its naval heritage and its ability to reach any coastline in the world. Together, the Eagle, Globe, and Anchor represent commitment to defend the nation in the air, on land, and at sea.⁴⁸ The iconic image of the Iwo Jima memorial represents the Marine Corps' amphibious roots, its dedication to the nation and to each other, and the sacrifice of all Marines who have given their lives for their nation. Inscribed on the monument is a quote from Admiral Nimitz that says, "Uncommon valor was a common virtue."⁴⁹

Organizationally, the Marine Corps values its independence, much like its naval brethren. However, while it operates its own aircraft, and land units, it is dependent on the Navy for transportation, operational support, budget, and equipment.⁵⁰ The Marine Air-Ground-Task Force (MAGTF) is a self-contained, scalable fighting package that fights in the air, on land and from the sea. And while Marines depend on teamwork to fight, they prefer if that team is comprised of all Marines, and otherwise prefer to fight alone.⁵¹ Appendix C1 provides a list of additional artifacts.

Espoused Beliefs and Values

Who they are

Marines live by the Core Values of "Honor, Courage, and Commitment." These are the same values of the US Navy- a nod to their shared naval heritage. Additionally, the Marines live by the famous motto "Semper Fi." Its significance is expounded upon below.

Latin for "always faithful," Semper Fidelis became the Marine Corps motto in 1883. It guides Marines to remain faithful to the mission at hand, to each other, to the Corps and to country, no matter what. Becoming a Marine is a transformation

that cannot be undone, and Semper Fidelis is a permanent reminder of that. Once made, a Marine will forever live by the ethics and values of the Corps. In addition to Semper Fidelis, Marine Corps Officers also embrace the phrase Ductos Exemplo, “to lead by example,” the motto of Officer Candidates School (OCS).⁵²

Appendix C2 provides a listing of Marine Corps espoused beliefs and values.

What they Do

True to their expeditionary roots, the Marine Corps is always forward deployed and claims the title “First to Fight,” and along with the Navy make up the nation’s “First Line of Defense.” A swift and aggressive response is their hallmark, centered on the concept of Maneuver warfare through the use of Combined Arms—Air, Sea, and Land. Throughout their history, the Marines have prided themselves on “winning battles” for the nation and have continued to focus on remaining America’s “expeditionary force of choice.”⁵³ Appendix C3 provides a listing of the Marine Corps mission, approach, and vision.

Basic Underlying Assumptions

Soldiers from the Sea

The Marine Corps has deep cultural roots with the Navy and the Army. They have a long history of embarking on Navy ships and have fought alongside the Army since the Revolutionary War. Influenced by the Navy, the Marine Corps places value on decentralized execution and independence of command. Another shared cultural value with the Navy is their expeditionary mindset and the importance of naval power projection. Where naval missiles and aircraft could not succeed, the Marine Corps provided a means for the Navy to influence objectives ashore.⁵⁴ And in this way, as a

Navy-Marine Corps team, the two services claim the role as “America’s first line of defense.”⁵⁵

Through the Army’s influence, the Marines have adopted several aspects of their organization model and doctrine, in many cases adapting it to fit their expeditionary role. Marine doctrine tends to be broader and less prescriptive than the Army’s, and the organizational structure is similar but not identical.⁵⁶ Nevertheless, the similarities between the two organizations are clear, from the way both services embrace Combined Arms Maneuver, to the rank structure of the officers and the organization of the general staffs, and even to some extent the similarities in weapons, the Marine Corps has often played the reluctant role of a second land army, a role it quickly tries to shed to return to its naval expeditionary roots.⁵⁷

Need for Institutional Survival Drives Innovation

The smallest of the services, the Marine Corps has been constantly fighting for its survival and justifying its existence over the last 238 years. Competition for scarce resources have caused the Navy, the Army, and even a few Presidents to call for the reduction or elimination of the Marine Corps. But in each case, the American people and Congress have protected them. The result has been a healthy paranoia which has been a driver for the Marines to constantly evaluate their role in the current and future environments often leading to innovations to increase their value to the American people. These innovations included an Amphibious Warfare Doctrine, Close Air Support (CAS), Small Wars Doctrine, Casualty Evacuation, and the concept of Maritime Prepositioned Forces, just to name a few. While the National Security Act of 1947 codified into law the

existence of the Marine Corps, the culture of institutional paranoia continues to this day and continues to be a driver for innovations within the service.⁵⁸

Making Marines and Winning Battles

In terms of cold mechanical logic, the United States does not need a Marine Corps. However, for good reasons which completely transcend cold logic, the United States wants one.⁵⁹—LtGen Victor “Brute” Krulak, USMC, 1957

In his book *The First to Fight*, LtGen Krulak identifies why the nation wants a Marine Corps and what the Corps must do to keep the nation’s support. He explains that the nation wants a Marine Corps for two principal reasons- Making Marines, and Winning Battles. In *Making Marines*, LtGen Krulak recognized that Americans not only valued the Marines as a reliable fighting force during times of conflict but that the Marine Corps helped transform the nation’s youth into citizens of reliable character who often continued their public contributions long after they left uniformed service.⁶⁰

[The Nation] believes. . . that our Corps is good for the manhood of the country; that the Marines are masters of a form of unfailing alchemy which converts un-oriented youths into proud, self-reliant, stable citizens - citizens into whose hands the nation's affairs may be safely entrusted.⁶¹

An example of the Marine Corp’s dedication to this cause is the fact that all newly commissioned Marine officers must attend six months of leadership training at The Basic School (TBS) regardless of military occupational specialty. The Marine Corps is unique from the other services in this requirement and it represents their dedication to properly training the young officers that will lead their Marines into battle. The TBS mission is to “Train and educate newly commissioned or appointed officers in the high standards of professional knowledge, esprit-de-corps, and leadership required to prepare them for duty as company grade officers.”⁶² The making of a Marine is a task the service takes very

seriously and it is in this endeavor that the Corps helps its newest members to understand and internalize the credo of “Once a Marine, Always a Marine.”⁶³

Winning battles is the second critical task to the nation. While acknowledging it is still the Army’s job to “win the nation’s wars,” the Marine Corps is the “first to fight” as an expeditionary combat force. And because of the public’s belief in the Marine’s fierce warrior culture, it is expected that they will win every time and that Marines would “die before accepting anything less.”⁶⁴ And with this dedication to winning the nation’s battles, comes at times the need to find creative ways to accomplish the task, even if it means departing from the service’s formal roles and mission. In this way the Marine Corps balances its strict adherence to its service culture with the need to be flexible and adaptable if they are part of a joint fight.⁶⁵

The Air Force

Builder states:

The Air Force, conceived by the theorists of airpower as an independent and decisive instrument of warfare, sees itself as the embodiment of an idea, a concept of warfare, a strategy made possible and sustained by modern technology. The bond is not an institution, but the love of flying machines and flight . . . [The Air Force] is the keeper and wielder of the decisive instruments of war—the technological marvels of flight that have been adapted to war. . . . It is about ensuring the independence of those who fly and launch these machines to have and use them for what they are—the ultimate means for both the freedom of flight and the destruction of war.⁶⁶

Artifacts

An examination of the Air Force artifacts reveal their predilection for airpower and a keen focus on the future. The Air Force emblem embodies the service’s colors of ultramarine blue and gold. The eagle representing the United States, is perched atop a cloud and is facing to its right which symbolizes facing the enemy and not dwelling on

the past but looking towards the future. The Shield, a universal symbol for defense is adorned with thunderbolts. Seemingly borrowing a page from the Navy's affinity for Greek and Roman mythology, the thunderbolts represent the weapon of Zeus or Jupiter—God of the Sky.⁶⁷ This is an interesting representation since Zeus in mythology was not only God of the Sky but also the King of the Gods, which is a representation that suitably fits with the Air Force's basic underlying assumption on the superiority of airpower and their need to control it.

The uniforms when compared to the other services are simple. There are no variations for seasons like the Navy and the Marine Corps, and there is no representation for the number of deployments like the Army. The wear of flight suits and flight jackets by flyers distinguish them from the rest of their Air Force and is a visible sign of the dominance that flyers have in a service created around the use of airpower.⁶⁸

Organizationally, the Air Force utilizes a deep hierarchy similar to the Army. This is represented in their structure from the Major Command to the Numbered Air Force, Wing, Group, Squadron, and Flight. But unlike the Army that utilizes Mission Command to coordinate its units, the Air Force uses the concept of Centralized Control and Decentralized Execution. The planning and control is accomplished in the Air Operations Center and promulgated through the Air Tasking Order (ATO). This concept will be discussed in more detail later in this chapter. Additional artifacts are listed in Appendix D1.

Espoused Beliefs and Values

Who they are

A summary of the Air Force beliefs and values are shown in the vision statement from General Welsh below and in Appendix D2. Common themes are service to the nation, excellence in mission, and the importance of airmen to the cause.

Air Force Chief of Staff Vision for the Future:

The source of Air Force airpower is the fighting spirit of our Airmen, and squadrons are the fighting core of our Air Force. The evolving threats we face demand that our squadrons be highly capable, expeditionary teams who can successfully defend our Nation's interests in tomorrow's complex operating environments. We will reinvigorate squadrons and emphasize a unified chain of command, focused on mission success, and supported by centralized functional managers. Our squadrons will be the cohesive, ready, and agile fighting forces that the Air Force, the joint force commander, and the Nation require.⁶⁹

Appendix D2 provides a list of Air Force espoused beliefs and values.

What they Do

While the Army claims the Land and Human domains, the Navy and the Marine Corps claim dominance in Air, Land, and Sea; the Air Force mission is to “fly, fight, and win . . . in air, space, and cyberspace.” What is interesting and important to note is the Air Force's rapid expansion into the new domains of space and cyberspace. The reason for this expansion will be discussed in their basic underlying assumptions later in this section. Appendix D3 lists the Air Force mission, enduring contributions, and operations.

Basic Underlying Assumptions

The Superiority of Air Power

Airpower would defend this nation; airpower would guarantee the success of a new international security organization; airpower would punish aggression wherever it might manifest itself; airpower would save the world.⁷⁰

Founded on the theories of Giulio Douhet and Billy Mitchell, the Air Force cemented the validity of its concept of warfare with the dropping of the first atomic bombs during World War II.⁷¹ While the effectiveness of airpower alone to win a war has been debated since the creation of the independent Air Force in 1947, the prominence of strategic airpower is still evident in the Air Force's ideology as can be seen in its doctrine even to this day.⁷² Despite the other services having their own air elements, the Air Force believes itself to be the nation's one true service that "focuses on maximizing options for decision-makers by optimizing airpower"⁷³ Following this logic and based on their experiences in Vietnam, the Air Force has tried (with some resistance) to influence the other services to follow their doctrinal tenet that all airpower needs to be controlled by a single air component commander.⁷⁴

Quality over Quantity

Given a choice of more older planes or fewer of newer ones, the Air Force has historically pushed for newer technology. This is because based on past experience, "No aviator –however skilled or courageous- can consistently overcome an opponent who deftly operates technologically superior equipment. As a result, Airmen, aware of the long lead time to develop complicated aircraft, always press to the most advanced systems far ahead of potential adversaries."⁷⁵

During the Cold War, the Air Force would have been more concerned with the Soviets developing a qualitatively superior aircraft than if they were to ramp up production with an existing line. "To be outnumbered is tolerable, to be outflown is not."⁷⁶ This is confirmed when comparing their investment in the new F-22 at \$420 Million a plane,⁷⁷ vice continuing the line of highly capable F-15s at \$31 Million a

plane.⁷⁸ Also, the Air Force decision to divest its fleet of older, but proven A-10s in order to ensure funding for its F-35s despite pushback from Congress and the Army is quite telling of its drive for modernization.⁷⁹

Love for Technology and Flight

Builder states that the Air Force “worships at the altar of technology.” From its inception the Air Force has embraced innovative technologies from the airplane, to nuclear missiles. It was technology that enabled their independence from the Army, and it is technology that will ensure its future.⁸⁰ One can see examples of this commitment to developing new technologies in the Air Force’s continuing evolution of its aircraft and the service’s expansion into the domains of space and cyberspace.⁸¹

Of all the services, the Air Force is by far the most attached to its toys. This is most noticeable in the pilot’s pride and association with the planes they fly. Builder speculates that “if the machines were somehow, moved en masse to another institution, the loyalty would be to the airplanes (or missiles).” The implication here is that for an airman, the pride in their jet, missile, or craft is greater than the pride or association with the institution. Pilots join the Air Force to fly, more than any other reason.⁸²

Future Oriented and Uninhibited by Tradition

The Air Force considers itself the most “forward-thinking of the services.” This is because the “Air Force associates the past with obsolescence, and for the air weapon, obsolescence equates to defeat.” While it certainly sees value in past lessons learned, those lessons are not as important to an Airman who works in an environment where rapidly changing technology can alter the warfighting equation.⁸³ This uninhibited

thinking can be most visibly seen in their embracing of the space and cyberspace domains.

While the other services take pride in their historical roots tracing back to foreign armies and navies, the Air Force enjoys its status as the youngest service “uninhibited by thinking derived from the days before man conquered the air.” This lack of traditional habits allow room for the Air Force to embrace the “more efficient and creative culture of the civilian enterprise.”⁸⁴

Builder comments:

the Air Force corridor [in the Pentagon] has taken on the look of the modern corporation. Portraits of past corporate executives mounted on designer wall panels line a hall that might well lead from the board room to the CEO’s office in any “Fortune 500 executive suite.” The image is of corporate taste, stability, and above all, power. If these corridors are harbingers of the future, then the Air Force may be changing from an adventure to a business.⁸⁵

An Emerging Joint Culture

According to Schein, “senior leaders are the key to creating, embedding, and transmitting an organization’s culture.”⁸⁶ Since the passage of the Goldwater-Nichols Act of 1986, great efforts have been made by senior leaders within the Department of Defense to create a new Joint culture. “Jointness” began to gain prominence as it was mentioned in the U.S. National Military Strategy in 1992 when General Colin Powell stated in his cover letter, “Our force for the 1990s is a Base Force -- A Total Force - A Joint Force...”⁸⁷ To this day, the concept and importance of Joint operations can be read in the latest strategies, capstone concepts, and vision documents produced by leadership at the Pentagon.⁸⁸

In addition to the Secretary of Defense and the Chairman of the Joint Chiefs of Staff providing a Joint vision and guidance through strategic documents and capstone

concepts, mechanisms are in place to encourage joint cooperation. These include the Joint Staff, Combatant Commands, Joint Doctrine, Joint Strategic Planning System (JSPS), Joint Capabilities Integration System (JCIDS), Joint Requirements Oversight Council (JROC), Joint Operational Planning and Execution System (JOPES), Universal Joint Task List (UJTL), and the Joint Qualification System (JQS). These are just some of the key Joint integration mechanisms that influence resource allocation, planning, and shaping of the capabilities of the individual services.⁸⁹

There is debate however, on whether a Joint culture can overcome service parochialism and inter-service rivalries. Builder states that “the most powerful institutions in the American national security arena are the military services—the Army, Navy, and Air Force— not the Department of Defense or Congress or even their commander in chief, the president.”⁹⁰ Dr. James Smith wrote the following in the 1998 Winter edition of the *Airman-Scholar*.

Certainly joint staff officers, those serving in joint staff billets, are working on issues involving close interservice cooperation. However, the joint arena is just that—it is not an organization but a forum for service interactions. Even after Goldwater-Nichols and congressionally mandated jointness, the JCS lacks most of the components of culture building. It selects officers already socialized into their service cultures, those services continue to be responsible for paying and promoting those officers, and they ultimately return to their service for follow-on assignment. The joint training these officers do receive is important in laying a foundation for joint service, but it is insufficient to create a joint culture. The joint staff is simply a number of very capable staff officers working on integration issues even as they continue to represent the distinct services operating side-by-side. . . . Perhaps this is the best cooperation possible at the present time. Organizational culture comes from within the organization—it cannot be imposed from the outside.⁹¹

Dr. Smith’s insights prove to have some merit as this paper will explore in case studies later in this chapter. While great efforts have been made for improved Joint force integration, cultural barriers still exist which stand in the way of Mission Command,

Cross-domain Synergy and Flexibility in Establishing Joint Forces—three elements of the GIOs in the Joint Force 2020 concept.

This section provided a cultural primer of the different services, highlighting potential friction points and laid a foundation for identifying cultural barriers to implementing the Joint Force 2020 concept. The following section will analyze select Joint concepts from the perspective of the different services and how they differ from each other.

Differing Perspectives on Joint Concepts

The reason the Air Force, Army, Navy and Marines bicker amongst themselves is that they don't speak the same language. For instance, take the simple phrase “secure the building.” The Army will post guards around the place. The Navy will turn out the lights and lock the doors. The Marines will kill everybody inside and set up a headquarters. The Air Force will take out a 5 year lease with an option to buy.⁹²

As stated earlier, cultural distinctions between the services breed different strategies, doctrines and preferences for organization, operations and planning.⁹³ Just as it is important to understand cultural differences between the different services, it is also important to understand the differing perspectives on key Joint concepts. The following section will discuss service differences on the use of Mission Command, Planning, and the Role of Airpower. While the list is not all-inclusive, it will provide a basis for understanding, highlighting differences in the separate service approaches to joint concepts.

Mission Command

In April 2012, Gen Martin Dempsey, the Chairman of the Joint Chiefs of Staff, released a white-paper titled *Mission Command*. In the paper, he calls for Mission

Command to be “institutionalized and operationalized into all aspects of the Joint Force,”⁹⁴ and urges “mission command is critical to our future success in defending the nation in an increasingly complex and uncertain environment.”⁹⁵

Mission Command has its roots from the Prussian Army dating back to the early 1800’s. A system was developed in which Commanders could issue broad orders to subordinates and allow them to devise the best way to carry out those orders. This enabled Commanders to effectively command large forces with multiple echelons.⁹⁶ The Joint definition of Mission Command is “the conduct of military operations through decentralized execution based upon mission-type orders. Successful mission command demands that subordinate leaders at all echelons exercise disciplined initiative and act aggressively and independently to accomplish the mission.”⁹⁷

General Dempsey’s guidance for Mission Command to permeate the entire Joint Force is considered a crucial enabler for flexibility in establishing Joint Forces and Cross Domain Synergy. While he acknowledges that the basic principles of Mission Command are already being employed, he argues that what is being practiced currently does not go far enough.

General Dempsey states:

The basic principles of Mission Command—commander’s intent, mission type orders and decentralized execution are not new concepts. They are part of our current joint and service doctrine. But this is not enough; we will ask more of our leaders in the future. Conduct of mission command requires adaptable leaders at every echelon. . . . The reliance and synergy of disparate elements to achieve operational objectives is the genesis for a deeply interdependent Joint Force 2020; this drives the need to create jointness deeper and sooner in the force. . . . Decentralization will occur beyond current comfort levels and habits of practice . . . the ethos of mission command is a critical enabler of success.⁹⁸

However, there are differences in how the services employ Mission Command and if not understood could cause friction in a Joint environment and prevent the synergy that is required in Joint Force 2020. The following sections will examine Mission Command from the perspective of each of the services.

Army

The Army defines Mission Command as “the exercise of authority and direction by the commander using mission orders to enable disciplined initiative within the commander’s intent to empower agile and adaptive leaders in the conduct of unified land operations.”⁹⁹ It is both a philosophy and a warfighting function, and in the latter role has caused some confusion among the other services. As a philosophy, Mission Command is explained in terms of the Art of Command- “the creative and skillful exercise of authority through timely decision making and leadership.” As a warfighting function, it is explained in terms of the Science of Control- “detailed systems and procedures to improve the Commander’s understanding and to support the execution of missions.” To the Joint community and the other services, the Army’s application of the Mission Command as a warfighting function could best be interpreted as C2.¹⁰⁰

Mission Command is employed down the chain of command through multiple echelons. A Corps Commander issues broad orders to their Divisions, and the Division Commanders issue more detailed orders to their Brigades based on their piece of the overall mission, and this continues down to the Company and Platoon levels. Through operational orders at each echelon, subordinate units are given a Commander’s Intent, Task and Purpose and it is up to the subordinate commanders to determine the best way to accomplish their assigned task.

For the Army, Mission Command is important because not only does it have to coordinate warfare across multiple echelons, the individual soldier at the platoon level is the smallest unit of maneuver. This notion of the “strategic corporal” is well known in the military, especially in an age of decentralized operations and instant media access.¹⁰¹ As Gen. Dempsey stated in his whitepaper, “Smaller units enabled to conduct decentralized operations at the tactical level with operational/strategic implications will be increasingly the norm.”¹⁰²

Navy

For the Navy, the smallest unit of maneuver is typically the ship or aircraft. On a ship, there is rarely a need to coordinate movement with its sailors. Once the Captain has given the order to change course, all 5,000 people onboard an aircraft carrier are subject to its movement. The notion of the “strategic corporal” has less meaning on a ship. Rarely will a junior sailor find himself in a situation for which he wasn’t trained or which his words or actions will have strategic consequences.

Every sailor onboard is a “shipmate.”¹⁰³ Like “family,” the term represents their trusted bond with each other to get through difficult situations like deployments. Shipmates depend on each other to carry out their assigned jobs which are highly specialized and standardized. From the reactor plant operator to the “shooter” who launches planes off the flight deck, there is little overlap in jobs on board a ship, the exception being the need for every crewmember to be qualified to help fight a fire. This necessary but highly specialized and standardized environment is not conducive to the type of disciplined initiative called for in Mission Command. Shipmates are expected to conduct their jobs the way they were trained, as a small (but important) part of overall

shipboard operations. Because of this, ultimate authority and thus initiative for the unit lies with the Captain of the ship.

The Navy does not have the term ‘Mission Command’ in its service doctrine but espouses “Centralized Planning, Decentralized Execution.”¹⁰⁴ The preference for decentralized execution stems from the service’s value for Independent Command at Sea and the nature of the maritime domain, characterized by great distances with historically limited communications. Even with the modern communications equipment that are available today, the Navy espouses decentralized execution with a thorough understanding of the Commander’s Intent as the key tenet of their C2 philosophy.¹⁰⁵ Put simply, Naval Commanders provide the “what” and the “why,” and then rely on the subordinate commanders to decide “how” the action will occur.

This practice of decentralized execution is apparent in the Navy’s use of “Command by Negation.” Command by Negation is a “C2 philosophy in which the subordinate commander has freedom of action to direct and execute those operations necessary to accomplish assigned and implied missions, unless specific actions and operations are overridden by a superior commander.”¹⁰⁶ This C2 philosophy is utilized in the Composite Warfare Commander (CWC) doctrine, where the Officer in Tactical Command (OTC) delegates authorities to subordinate principal warfare commanders—e.g. the anti-air warfare commander (AAWC), the strike warfare commander (STWC), anti-surface warfare commander (ASUWC), and the anti-submarine warfare commander (ASWC), in order to promote decentralized execution and to allow the OTC to focus on the overall mission.¹⁰⁷

The CWC doctrine goes a step further than Mission Command, however. In Mission Command, decentralized execution is accomplished through mission type orders, in the CWC, the OTC actually delegates his command authorities to his subordinate principal warfare commanders whose decisions affect the entire carrier strike group. The equivalent in the Army would be if a Corps Commander delegated his authority to control Movement and Maneuver or Protection of his Corps to his subordinate Division Commanders.

While Navy doctrine does not have the term 'Mission Command', The Naval Aviation community does interestingly enough incorporate the use of 'Mission Commanders' (MC). These are Naval Aviators or Naval Flight Officers that have the trust of their Commanding Officer to lead the assigned mission and have the authority to conduct the mission as they see fit, including the decision to abort if necessary. In this regard, Naval Aviation is very similar to the Air Force and how it conducts decentralized execution of its aircraft.

Marine Corps

Marine Corps doctrine offers a range of C2 options that fall between two fundamental approaches to Command and Control: Detailed C2 and Mission C2. These approaches reflect their belief that the appropriate approach to Command and Control is situation dependent. In their Detailed C2 approach, a centralized approach is used to impose order and certainty on a disorderly and uncertain environment. Orders from the Commander tend to be detailed, formal, and require strict adherence thus minimizing subordinate decision making and initiative. In this approach, information flows up from subordinates and orders flow down from the Commander. The Detailed C2 approach

tends to move slowly and may not react well to rapidly changing situations.¹⁰⁸ This type of approach may be appropriate for strict control of chaotic situations where the necessity to impose order and certainty is more important than flexibility or adaptability.

On the other end of the spectrum is the Mission C2 approach. This approach offers decentralized execution and is both informal and flexible. Subordinates are given the Commander's Intent and Mission type orders which are as brief and simple as possible allowing maximum flexibility and enables decision making. This type of approach is fast and efficient and allows more effective responses to fluid and disorderly situations.¹⁰⁹

At the center of the decision on what type of C2 approach to utilize in the range from Detailed C2 to Mission C2, lies the concept of the observe-orient-decide-act (OODA) model developed by Air Force Col John Boyd. The "OODA loop" is an important concept that dictates the approach to C2, and is based on attempting to act inside the adversary's decision cycle. And because of the speed of the Mission C2 process and its flexibility in disorderly situations, the Mission C2 approach is often the preferred approach to C2 in the Marine Corps.¹¹⁰ This preference for Mission C2 fits well for a service, much like the Army, that has its smallest unit of maneuver as the individual rifleman (Marine) making the concept of the "strategic corporal" just as valid.

Air Force

The Air Force operates under the doctrinal tenet of "Centralized Control, Decentralized Execution." And like the Navy, the Air Force does not have the term 'Mission Command' in its service doctrine. However, like the other services, the Air Force embraces the concept of decentralized execution by stating in their doctrine

“Execution should be decentralized within a command and control architecture that exploits the ability of front-line decision makers . . . to make on-scene decisions during complex, rapidly unfolding operations.”¹¹¹

Like the Marine Corps, Air Force doctrine calls for a balanced approach to C2 that is dependent on the situation. While Decentralized Execution is preferred in tactical situations like Air Superiority and Close Air Support, the emphasis for Centralized Control becomes more apparent when the effects of a mission are operational or strategic.¹¹² The Chairman of the Joint Chiefs of Staff even acknowledges in his Joint Force 2020 concept that “It is important to note that while mission command is the preferred command philosophy, it is not appropriate to all situations. Certain specific activities require more detailed control, such as the employment of nuclear weapons or other national capabilities, air traffic control, or activities that are fundamentally about the efficient synchronization of resources.”¹¹³

The need for centralized control is best described by the following quote: “Control of available airpower must be centralized and command must be exercised through the Air Force commander if this inherent flexibility and ability to deliver a decisive blow are to be fully exploited.”¹¹⁴ Additionally, due to the high demand and limited availability of airpower assets, there is the need to prioritize resource allocation by the Joint Force Commander or higher, particularly for strategic missions like the prosecution of high-value targets, or politically sensitive missions.¹¹⁵

For the Air Force, the smallest unit of maneuver is the individual jet or bomber. Often the decisions for resource allocation and priorities are completed at the highest levels and often before the plane leaves the hangar. The Air Tasking Order (ATO) tells

the pilots the specifics of their mission and is centrally controlled. Decentralized Execution occurs when the plane takes off for the assigned mission. The degree of initiative will depend on the uncertainty of the target at take-off. A strategic bombing mission for example, would require little deviation from the scripted mission. Whereas, a close air support mission may require an extraordinary amount of initiative and coordination on part of the pilot and operators.

Joint Doctrine

When compared to the preceding service examples of Mission Command philosophies, the Joint definition and description are incredibly broad. C2 is defined in JP 3-0 as “related capabilities and activities grouped together to help Joint Force Commanders integrate, synchronize, and direct joint operations.” Joint doctrine places Mission Command as a “key component of its C2 joint function,” and defines it as “the conduct of military operations through decentralized execution based upon mission type orders.”¹¹⁶

Based on the above definition, all of the services comply with the Joint Mission Command philosophy. However, as discussed in this section, all of the services have their own unique approach to the philosophy and may cause friction between the services if not readily understood. Table 1 provides a summary of service philosophies to Mission Command.

Table 1. Mission Command	
Service	Philosophy
Joint	Decentralized Execution Based on Mission Type Orders
Army	Mission Orders to Enable Disciplined Initiative within the Commander's Intent
Navy	Centralized Planning, Decentralized Execution / Command by Negation
Marines	Detailed C2 vs. Mission C2 (Situation Dependent)
Air Force	Centralized Control, Decentralized Execution

Source: Created with information from James W. Harvard, “Airmen and Mission Command,” *Air and Space Power Journal* (March-April 2013): 135.

The service approaches are the result of cultural influences that have emerged as “best practices” and “lessons learned” over their histories. As the chairman stated, “while mission command is the preferred command philosophy, it is not appropriate to all situations.” It is important for the Joint warfighter to know when those situations are, as seen from the point of view of the different services. Cultural influences are not limited to the mission command approaches adopted by each service, they are also prominent in the methods each service has embraced for their own planning processes as will be discussed in the following section.

Planning

In addition to the Joint Operational Planning Process (JOPP) found in Joint Publication 5-0, Joint Operation Planning, each of the services have their own process for planning. The Army uses the Military Decision Making Process (MDMP), the Navy has the Navy Planning Process (NPP), the Marine Corps uses the Marine Corps Planning Process (MCP), and the Air Force has the Joint Operational Planning Process–Air

(JOPPA). Friction ensues when officers who are used to their service's planning process are forced to work together in a joint planning environment with other services.

An example of this friction is the planning process used with the formation of a Joint Task Force (JTF) around an Army Corps Headquarters. Despite the new joint designation, the Army Corps officers are likely more familiar with and undoubtedly more comfortable with Army MDMP. This may alienate sister service officers from the Navy and the Air Force that are more familiar with NPP and JOPPA respectively. Even if the new JTF embraced JOPP as the Joint standard for planning, the JTF's service components would likely follow old habit patterns and use their service specific approach to planning.¹¹⁷

Perhaps the greatest friction would occur not because the service planning processes are so drastically different from each other but because they are so similar with only minor differences, e.g. terminology. And it is these minor differences that create the most confusion, frustration, and disagreement. Figure 13 illustrates the similarities between the different planning processes.¹¹⁸

Planning Model Comparison

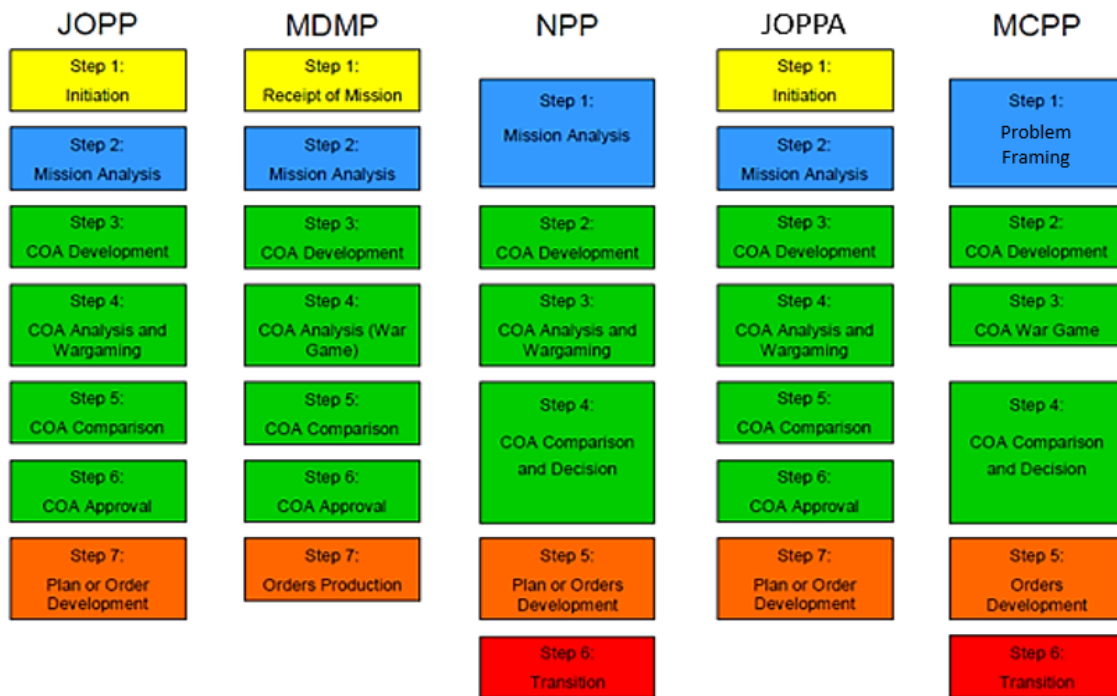


Figure 13. Planning Model Comparison

Source: Modified from: James C. Allen, “Adopting a Single Planning Model at the Operational Level of War” (Master’s thesis, US Army Command and General Staff College, 2008), 27.

A cursory comparison of the planning models would give the impression that these processes are very much similar if not the same. However, there are key differences not only in the input and output products but also in how the processes are conducted. A list of some of the differences are highlighted in table 2.

Table 2. Differences in Planning Processes	
Service (Process)	Key Differences (not all inclusive)
Army (MDMP)	<ul style="list-style-type: none"> - Issues Warning Orders to Subordinates after Steps 1, 2, 6 - Intelligence Preparation of the Battlefield (IPB) vice Intelligence Preparation of the Operational Environment (IPOE) or JIPOE - Does not consider Centers of Gravity (COGs) in Mission Analysis - No doctrinal reference to the term “restraints”
Navy (NPP)	<ul style="list-style-type: none"> - Does not include Initiation (Step 1) - Warning Order issued after Mission Analysis (Step 1) and Plan or Orders Development (Step 5) - COA Comparison and Decision are completed together (Step 4) - Conducts reconciliation to ensure base order and annexes are in agreement (Step 5) - Includes Transition Step to ensure successful execution, e.g. rehearsals (Step 6)
Marine Corps (MCP)	<ul style="list-style-type: none"> - All the differences highlighted in the Navy’s NPP - MCP calls Mission Analysis, “Problem Framing” (Step 1) - Intelligence Preparation of the Battlefield (IPB) vice Intelligence Preparation of the Operational Environment (IPOE) or JIPOE
Air Force (JOPPA)	<ul style="list-style-type: none"> - “Air Minded”–Led by Air Operations Center (AOC) Strategy Division (SRD) to produce Joint Air Operations Plan (JAOP) which guides the Air Operations Directive (AOD), and other air component plans.¹¹⁹

Source: Modified from James C. Allen, “Adopting a Single Planning Model at the Operational Level of War” (Master’s thesis, US Army Command and General Staff College, 2008), 66.

Based on the information provided in table 2, one can see the differences are subtle between the planning processes. But it is in those subtle differences where friction can occur. For example, the fact that the Army’s MDMP process does not include COG analysis is quite revealing of its tactical nature. Friction may occur with officers from other services that are more focused on the operational and strategic end-states. Also, the fact that COA Comparison and COA Decision are done in one step in the Navy’s NPP and the Marine Corps’s MCP may create synchronization problems with the Army and

the Air Force where they are done in separate steps. This could pose a problem in parallel planning situations when trying to establish a JTF battle rhythm for planning.

Finally, despite the minor differences in planning models, if one of the services were to use another's planning process, e.g. the Army using the Navy's NPP, the end result would be the same. This is because of the services focus on their respective domains and mission sets, combined with the individual training, experience, and the organizational culture imbued within its officers. In short, the staff officer would find a way to make the planning process fit into their service's paradigm. The root of the friction then is not the multitude of planning processes in itself but the staff officer's predilection for his own service specific approaches.

Anecdotally, this author witnessed this friction first hand in a recent student led joint exercise at the US Army Command and General Staff College. The Navy students were tasked to break off from their staff groups to set up a Joint Force Maritime Component Commander (JFMCC) cell as part of the exercise. Despite having gone through nearly a year of Army tactics training and being exposed to its culture, the Navy students often felt frustrated with the lack of integration and the landpower centric mentality from their Army peers playing the role of the Joint Task Force (JTF) higher headquarters. The Army students felt equally frustrated that the JFMCC produced plans that did not nest perfectly with their own, i.e. differences in terminology, phasing, etc. This was quite a revealing experience for this author. If Navy Lieutenant Commanders had difficulty integrating with their Army peers after nearly a year of cultural exposure and Army doctrinal training, then it is to be expected that even bigger challenges await for those who have not gone through such an experience.

The Role of Airpower

Since the creation of the independent Air Force in 1947, few topics have generated the amount of tension between the services as the proper role and employment of airpower. The following paragraphs will detail the individual services views on the topic in an effort to highlight the philosophical differences that may create friction in a Joint environment.

Army

At the heart of the Army's tension with the other services regarding the proper use of airpower lies the basic underlying assumption that the Army is the "supported service" and that while it is a proponent of Joint operations, it perceives the fundamental role of the other services as support to the Army.¹²⁰

John Gordon and Jerry Sollinger, in *Parameters (Summer 2004)* wrote:

To be sure, the sister services fulfill other roles: clearing the air of enemy aircraft and the seas of enemy vessels. But in the Army view, these are subsidiary roles and ultimately intended to facilitate the Army's mission of winning the land battle. The Army closes with and destroys enemy forces, with the other services in support.¹²¹

Another significant source of tension, particularly between the Army and the Air Force is whether airpower alone can be the arbiter of success. For the Air Force, the dropping of the atomic bombs on Japan during WWII validated their theory on the use of strategic attack and eventually led to their independence from the Army with the passage of the National Defense Act of 1947. This theory was re-validated with the overwhelming success of the air campaign during Desert Storm in 1991.¹²² The Army, for the purposes of preserving their status (and funding) as the service that "wins the nations wars," never accepted the efficacy of strategic attack, as evidenced in the quote below:

From Current Army Doctrine (ADP 1):

Landpower is usually the arbiter of victory. The Army provides the United States with the landpower to prevent, shape, and win in the land domain. . . . No major conflict has ever been won without boots on the ground. Strategic change rarely stems from a single, rapid strike. [A]nd swift, victorious campaigns have been the exception in history.¹²³

This philosophical difference of opinion on the role and efficacy of airpower is evident in how the Army and the Air Force view the successes of past campaigns.

Despite the Air Force citing Desert Storm as a premier example of how airpower alone can defeat land forces¹²⁴, the Army insists that airpower merely played a supporting role that contributed to a decisive ground campaign, as evidenced in the quote below.

From the book *Certain Victory*:

Yet the air operation, even though it lasted 41 days, failed to break the will of the Republican Guard, to stop it from responding to the Great Wheel, or to prevent it from retiring some of its elements to safety. . . . [A] first-rate unit with high morale and good leadership can reconstitute its fighting strength if the destruction occurs gradually through attrition rather than suddenly through decisive, unrelenting close-in combat.¹²⁵

The Army is heavily dependent on Joint airpower to support them with Fires, Intel/Surveillance/Reconnaissance (ISR), Close Air Support (CAS), and transportation. Though organically, the Army can employ airpower through its Combat Aviation Brigades (CAB), these units are limited to transport (UH-1/UH-60/CH-47) and attack helicopters (AH-64/AH-6), and short distance Unmanned Aircraft Systems (UAS).

Figure 14 illustrates the CAB's role in the Army and reveals that their missions are centered on the supporting of ground forces.

<i>Army Warfighting Function</i>	<i>Aviation Brigade's Role</i>
Movement & Maneuver	Support ground maneuver elements in contact through CCA. Conduct air assault in support of search and attack operations. Conduct movement to contact to locate and destroy enemy forces.
Intelligence	Conduct area reconnaissance to identify adequate routes and locate bypasses. Perform surveillance to confirm or deny enemy activity.
Fires	Utilize attack reconnaissance helicopters to conduct battle damage assessment (BDA) of fires. Designate for laser-guided artillery or other service munitions during joint air attack team (JAAT) operations.
Sustainment	Perform aircraft recovery to include insertion of downed aircraft recovery teams (DARTs) and ground maintenance contact teams. Support forward arming and refueling point (FARP) emplacement and resupply operations. Perform casualty evacuation (CASEVAC) and aeromedical evacuation (MEDEVAC).
C2	Provide battle command on the move (BCOTM). Provide retransmission capability to air and ground commander. Provide air traffic services (ATS).
Protection	Provide convoy security. Conduct area security through counter mortar and rocket operations.

Figure 14. Aviation Brigade's Role in Army Warfighting Functions

Source: Headquarters, Department of the Army, Army Field Manual 3-04.111, *Aviation Brigades* (Washington, DC: Government Printing Office, 2007), http://armypubs.army.mil/doctrine/DR_pubs/dr_a/pdf/fm3_04x111.pdf (accessed March 19, 2014), 1-3.

Not included in the table is Interdiction Attack—"an attack by Army aircraft to divert, disrupt, delay, degrade, or destroy enemy combat power before it can be used effectively against friendly forces."¹²⁶ While Interdiction Attack operations are mentioned in Field Manual (FM 3-04.111), there is debate on the utility of using Army helicopters to perform such missions in a deep fight.

General Merrill McPeak, former Air Force Chief of Staff, stated:

The AH-64 and other attack helicopters should have their operations restricted to short-range missions directly in combat support of land forces. . . . [He] argues

that nothing can give attack helicopters the stealth and speed necessary to survive, and that aircraft like the A-10 and fighters using standoff precision weapons are far more effective in the mission.¹²⁷

This seeming inability to conduct long range Interdiction Attacks solely with the Army's organic aviation assets creates an uneasy dependence on the Air Force and other Joint capabilities.

Friction can occur when targets nominated by the Army to the Joint Targeting Coordination Board are passed over for more strategic targets nominated by the other services. Such was the case in Kosovo in 1999 during Operation Allied Force, where the tension between the Supreme Allied Commander, General Wesley Clark, and the Coalition Force Air Component Commander (CFACC), General Michael Short, are well documented. General Clark insisted on using airpower to attack enemy ground forces while General Short advocated Effects-Based-Targeting (EBT).¹²⁸

General Clark (SACEUR) stated in his memoirs:

I found myself reiterating our priorities again and again. "You must impact the Serb Forces on the ground." "Do you understand that attacking the Serb forces on the ground is my top priority?" "We're going to win or lose this campaign based on how well we go after the ground targets."¹²⁹

General Short (CFACC) noted:

I felt I did everything I could to get SACEUR to understand airpower. I did everything I could to oppose what I thought was bad guidance . . . I don't know what more I could've done to get SACEUR to understand the process.¹³⁰

Lastly, the issue of battlespace management has been a well-documented source of tension between the Army and the Air Force in recent conflicts.¹³¹ During Operation Iraqi Freedom (OIF), the land component commander's (CFLCC) placement of the Fire Support Coordination Line (FSCL) well beyond their Forward Edge of the Battle Area (FEBA) had restricted the CFACC's ability to pursue targets it otherwise might have

been able to. This can be attributed to the land component's desire to attack targets within his own Area of Operations (AO) with organic assets rather than depending on Joint Fires, or to ensure safety of rapidly moving land forces.¹³²

From "Saddam's Elite in the Meat Grinder," *Air Force Magazine* 2003b:

The helicopter attack also had a limiting effect on other airpower operations. Sorties by fixed-wing aircraft were reduced to make way for the Apache action, and the fire support coordination line in the sector was moved dozens of miles farther out in front of coalition forces . . . The decision to move the FSCL "cost us, basically, a full night of fixed-target strikes inside the FSCL," said [Lieutenant General-Daniel P.] Leaf. "We—the entire coalition team—had not hit our stride in achieving the command and control required to operate in volume effectively inside the fire support coordination line."¹³³

Figure 15 illustrates the Army FSCL placement in OIF.

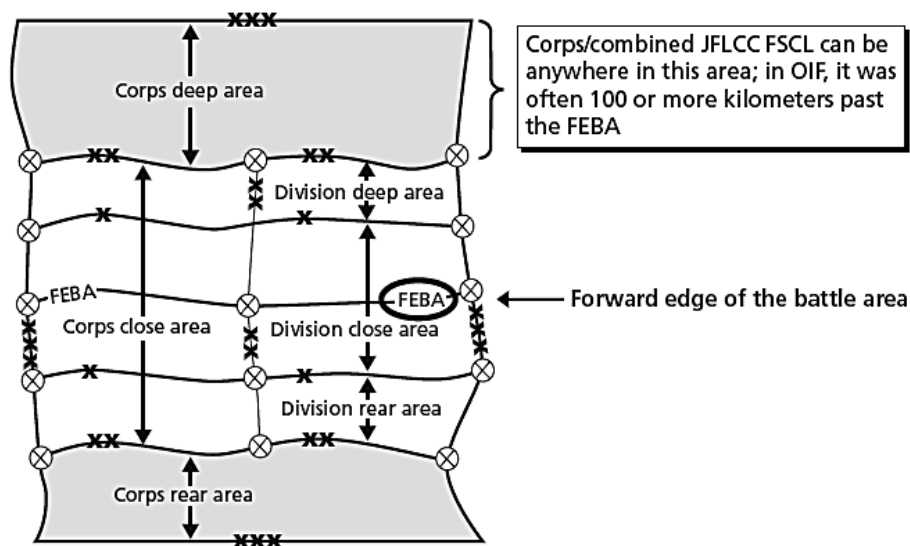


Figure 15. Army FSCL Placement in OIF

Source: David E. Johnson, *Learning Large Lessons, The Evolving Roles of Ground Power and Air Power in the Post Cold-War Era* (Santa Monica: RAND–Project Air Force, 2007), 132.

Marine Corps

The Marine Corps values its Air Combat Element (ACE) as an integral part of its Marine Air Ground Task Force (MAGTF). “The ACE’s role is to project combat power, conduct air operations, and contribute to battle-space dominance in support of the MAGTF’s mission . . . Marine aviation can operate from amphibious platforms, forward operating bases (FOBs), forward expeditionary land bases, carriers (as an integral part of carrier air groups), or any combination thereof.”¹³⁴ Additionally, unlike Army aviation that is focused on supporting tactical ground forces, Marine aviation is utilized for strategic, operational, and tactical missions as an integral part of the MAGTF.¹³⁵

Marine Aviation has over a hundred years of history in supporting and integrating with Marine ground forces as part of a combined arms organization. It saw success with Close Air Support and Deep Air Support as early as 1927 in Nicaragua and has a long tradition of synergy within its service.¹³⁶ The notion of “Marines supporting their own” is a strong reflection of its service culture “based on trust, unity of command, and a common mission.”¹³⁷

F.G. Hoffmann:

Inside the Corps the belief is that collective trust in the Officer Corps is deliberately generated and is based on shared culture because Marine officers attend a common bonding experience at both Officer’s Candidate School (for all but Academy grads) and the six month long Basic Course. This common schooling in Marine warfighting philosophy instills a common approach to warfighting that does not place primacy in a particular dimension, but rather, emphasizes the synergy of combined arms and the Marine Air Ground Team. . . . The Marines believe in balancing both air and ground maneuver synergistically and think in terms of combined arms, not air or ground dominance. Their doctrine reinforces this, and their force structure demands it because they lack the ground combat power of traditional conventional armies.¹³⁸

Thus for a Marine on the ground, the preferred aviation asset to provide CAS is a fellow Marine in the air, followed by Naval Aviation and then the Air Force, in that order. The preference for Naval Aviation over the Air Force stems from the long history the Marines share with the Navy. While Naval Aviators do not go through the same bonding experience with Marines at OCS or The Basic School (TBS) that Marine Aviators do, they do go through the same flight training provided by the Navy and earn the same “wings of gold.”

There are six functions of Marine Aviation as depicted in figure 16. The principal difference between Army and Marine Aviation is the Marine’s ownership of fixed wing assets—most notably the F/A-18 Hornets, E/A-6B Prowlers, AV-8B Harriers, and C-130 Hercules, and the V-22 Ospreys. This makes the Marines more effective at virtually every air function and also gives them the ability to conduct electronic warfare (EW), air-to-air combat (AAW), and more effective Air Interdiction than their Army counterparts.

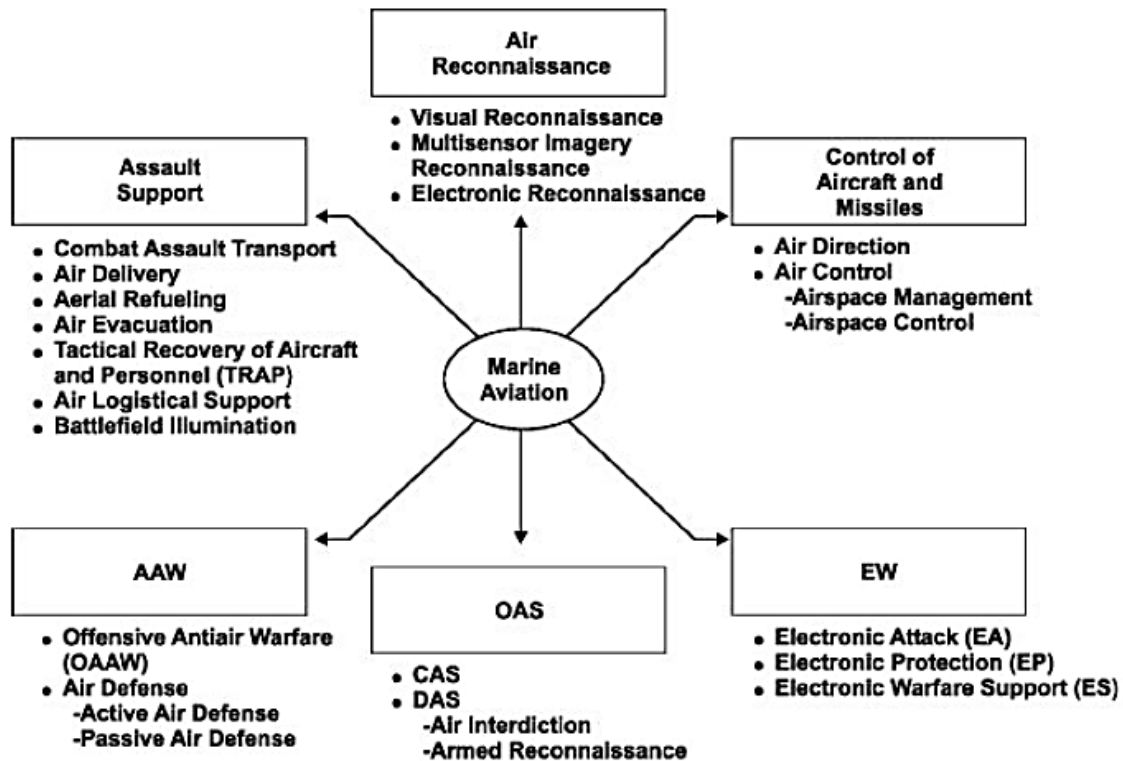


Figure 16. The Six Functions of Marine Aviation

Source: Headquarters, Department of the Navy, Marine Corps Warfighting Publication, MCWP 3-2, *Aviation Operations*, <http://www.doctrine.usmc.mil> (accessed March 20, 2014).

The benefits of the Marine Corps' ownership of organic and highly integrated fixed wing assets as part of its own combined arms team are clear when compared to the relationship between the Army and the Air Force. Where in Iraq during OIF in 2003, the Army placed a FSCL dozens of miles from its FEBA precluding the use of Joint Fires, the Marine Corps was able to employ a Battlefield Coordination Line (BCL) to allow much more efficient use of airpower, opening up all killboxes beyond the BCL.¹³⁹ Additionally, the Marines have the capability of conducting effective Air Interdiction in a

deep fight through the use of their fixed wing assets- a challenge for the Army's rotary wing Apaches.¹⁴⁰

Despite the Marine Corps advantage in aviation over the Army, the Marines would be hard pressed to give away aviation assets from its MAGTF in direct support of external units. Although doctrinally, the MAGTF will provide excess aviation sorties to the JFACC to support the Joint Force Commander, it does this reluctantly and prefers to support the Joint fight through the ACE's role as part of the MAGTF, as evidenced in the following excerpt from Marine doctrine (MCWP 3-2):

Marine aviation supports joint force operations as an integral part of the MAGTF. This ensures that the MAGTF retains its unique capability to generate combined-arms combat power. The MAGTF commander will retain operational control (OPCON) of the ACE during all joint operations. Any sorties in excess of the MAGTF's direct support requirements are normally made available to the JFC.¹⁴¹

If friction exists with Marine Aviation and the other services, it lies in the MAGTF's doctrinal need to have a close hold of its aviation assets in order to support the MAGTF's overall mission. To be short on aviation assets would disturb the synergy of the MAGTF and would possibly create a reliance on the other services, running contrary to its culture of independence and self-reliance.

Navy

When the Japanese attacked Pearl Harbor on December 7, 1941, they sank or badly damaged all eight of the US Pacific Fleet's battleships, forcing the US Navy to carry out its retaliatory campaign against Japan relying on the aircraft carriers that were spared from the attack. The ensuing success of naval aviation in the Pacific during World War II, would catapult its role to the heart of naval strategy for the next 73 years and beyond.¹⁴²

Admiral Chester W. Nimitz:

The development between World Wars I and II of naval aviation provided naval forces with a striking weapon of vastly increased flexibility, range and power. It spearheaded our Pacific attack. First, it swept the sea of all naval opposition. Then it became the initial striking weapon in the capture of Guam, Saipan and Iwo Jima. In all these operations the employment of air-sea forces demonstrated the ability of the Navy to concentrate aircraft strength at any desired point in such numbers as to overwhelm the defense at the point of contact. These operations demonstrate the capability of naval carrier-based aviation to make use of the principles of mobility and concentration to a degree possessed by no other force.¹⁴³

Naval Aviation is inextricably linked to the Navy's maritime strategy and mission sets. It provides a means to project power ashore, control the sea, provide humanitarian assistance, and acts as a deterrent against external aggression by placing an aircraft carrier - what the Navy refers to as "4.5 acres of sovereign and mobile American territory"- anywhere in the world. Perhaps it is because of this fact there is no doctrinal publication or a warfighting document that separates Naval Aviation's specific roles like the other services do. However, for the purpose of facilitating comparisons with the other services, a summary of individual aircraft missions is provided in table 3.

Table 3. Missions of Naval Aircraft	
C-2A “Greyhound”	Carrier On-board Delivery (COD) aircraft
E-2C/D “Hawkeye”	Airborne Command & Control, Battle Space Management
E-6B “TACAMO”	Communications relay for fleet ballistic missile submarines, airborne command post for U.S. Strategic forces
EA-6B “Prowler”	Suppression of Enemy Air Defenses
EA-18G “Growler”	Airborne Electronic Attack
EP-3E “Aries II”	Signals Intelligence (SIGINT) reconnaissance aircraft
FA-18 C/D/E/F “(Super) Hornet”	Multi-role attack and fighter aircraft
P-3C “Orion”	Long range Anti-Submarine, Anti-Surface, Maritime Surveillance, Mining
P-8A “Poseidon”	Same missions as P-3C
CH-53D “Sea Stallion”	Personnel and logistics transport in support of amphibious and shore operations
MH-53E “Sea Dragon”	Airborne Mine Countermeasures (AMCM), vertical shipboard delivery, assault support
SH-60 B/F/R/D “Seahawk”	Anti-submarine warfare, search and rescue, drug interdiction, anti-ship warfare, cargo lift, and special operations

Source: Created by author with information from US Navy, “Fact File,” <http://www.navy.mil/navydata/fact.asp> (accessed May 8, 2014).

The *Naval Aviation Vision 2020* document further elaborates on the role of airpower in the Navy. “As the muscle of the [Carrier Strike Group], Naval Aviation facilitates access in both offensive and defensive environments. The carrier and its embarked air-wing provide Anti-Air, Anti-Submarine, Anti-Surface, and long range strike capability, while simultaneously coordinating battlespace management.”¹⁴⁴ Additional implied missions not specifically covered above include Joint missions like CAS, Air Superiority, Joint Fires, Joint ISR, and contributions to emerging concepts like Air-Sea Battle and Seapower 21.

During the Cold War, Naval Aviation was tailored for “blue-water” operations against the threat of the Soviet Navy. These maritime missions were focused on sea control and defending the battlegroup (mainly the carrier) in the open ocean, with a

secondary role to support the Marine Corps's Amphibious operations. With the fall of the Soviet Union and along with it the threat of its "blue-water" navy, the relevance of the Navy's strategy came into question, most notably during its problematic integration of its air-arm with the Air Force during Operation Desert Storm in 1991.¹⁴⁵

These issues would be resolved over time, as will be discussed in the Air-Sea Battle case study later in this chapter. As a result of the lessons learned from Desert Storm and the changing strategic environment, the Navy shifted its focus from a "blue-water" to a littoral ("brown-water") strategy with increased emphasis on traditional Air Force missions like Strategic Attack, ISR, CAS (supporting the Army), and Air Superiority missions over land, e.g. Iraq and Afghanistan. This new emphasis on what the Navy terms "strike warfare," not only created a necessary cultural change by the Navy (giving up some of its independence so that it might plug into the JFACC, often led by the Air Force) but prompted a need to upgrade its weapons and equipment to be capable of precision-strikes, and better integrate with Air Force processes, i.e. centralized control at the CAOC, and the ATO process.¹⁴⁶

Though with some friction along the way, the relationship with the Air Force would continue to improve up to and during the most recent campaigns in Iraq (OIF) and Afghanistan (OEF) where senior Navy admirals were highly integrated with the Air Force led Coalition Force Air Component Commander (CFACC) (often as deputies) and both Air Force and Naval Aviation assets provided seamless integration and synergies.¹⁴⁷ Thus the future of Naval Aviation will likely be continued close integration with the Air Force in conducting Joint operations in the littorals, i.e. Air-Sea Battle, as well as its

predominant role in protecting the fleet through its role in new concepts like Seapower 21.¹⁴⁸

If friction exists with Naval Aviation and the other services, it may be in the execution of emerging concepts like Air-Sea Battle. For example, the potential for friction exists in determining the proper C2 relationship for services supporting each other across domains. i.e. Will the Air Force who has historically not trusted the Army with control of its air assets¹⁴⁹ be willing to trust the Navy with such control in the maritime AO? To do so would undermine Air Force doctrine which calls for centralized control of air assets. The developing Navy-Air Force relationship as well as the Air-Sea Battle concept will be explored further in the case study later in this chapter.

Air Force

General Ronald R. Fogleman, USAF, retired:

The other services have air arms - magnificent air arms - but their air arms must fit within their services, each with a fundamentally different focus. So those air arms, when in competition with the primary focus of their services, will often end up on the short end, where the priorities for resources may lead to shortfalls or decisions that are suboptimum. It is therefore important to understand that the core competencies of [airpower] are optional for the other services. They can elect to play or not play in that arena. But if the nation is to remain capable and competent in air and space [sic], someone must pay attention across the whole spectrum; that is why there is a US Air Force.¹⁵⁰

For the Air Force, airpower is at the core of what they do and what they represent as a service. It is the “ability to project military power or influence through the control and exploitation of air, space, and cyberspace to achieve strategic, operational, or tactical objectives.”¹⁵¹ What differentiates the Air Force from the other services in the employment of airpower is that while the other services use airpower to support their organic maneuver paradigms, the Air Force has a broader focus on theater-wide and

national-level objectives.¹⁵² This is accomplished primarily through the use of strategic attack.

From Air Force Doctrine:

Strategic attack is defined as “offensive action that is specifically selected to achieve national or military strategic objectives. These attacks seek to weaken the adversary’s ability or will to engage in conflict, and may achieve strategic objectives without necessarily having to achieve operational objectives as a precondition.” Strategic attack involves the systematic application of force against enemy systems and their centers of gravity, thereby producing the greatest effect for the least cost in lives, resources, and time. Vital systems affected may include leadership, critical processes, popular will and perception, and fielded forces. Strategic attack provides an effective capability that may drive an early end to conflict or achieve objectives more directly or efficiently than other applications of military power. Strategic attack seizes upon the unique capability of airpower to achieve objectives by striking at the heart of the enemy, disrupting critical leadership functions, infrastructure, and strategy, while at the same time avoiding a sequential fight through layers of forces.¹⁵³

The above definition of strategic attack confirms the ongoing tension between the Army and the Air Force. While Army doctrine declares that “landpower is usually the arbiter of victory”¹⁵⁴, the Air Force advocates strategic attack (through airpower) as a way to save lives, resources, and time by avoiding a ground conflict altogether.

In addition to the theater-level and national-level objectives accomplished through strategic attack, the Air Force employs airpower through a wide range of operations from counter air/land/sea and space to cyber warfare. (The full list of operations can be seen in Appendix D3.) In conducting these operations, the Air Force argues it has earned a right to be equal to land and maritime power and is no longer relegated as a supporting force.¹⁵⁵ The following excerpt from Air Force Doctrine from 2003 summarizes the Air Force’s view that not only does it no longer merely play a supporting role to the Army, but in some cases it should be supported by land forces in achieving its own objectives.

the 1991 Persian Gulf War, has proven that air and space power can be a dominant and frequently the decisive element of combat in modern warfare. Air and space power is a maneuver element in its own right, coequal with land and maritime power; as such, it is no longer merely a supporting force to surface combat. As a maneuver element, it can be supported by surface forces in attaining its assigned objectives. Air and space power has changed the way wars are fought and the manner in which the United States pursues peacetime efforts to protect the nation's vital interests.¹⁵⁶

As discussed in the earlier section on Army aviation, friction exists between the Army and the Air Force regarding the role of airpower and its proper employment. Just as the Army is reluctant in its dependence on the Air Force for fixed wing aerial support, the Air Force is equally uneasy of ceding control of its air assets to an Army commander, even if it is in his AO.

For its part, Air Force culture similarly inhibits close integration with the Army. While senior Air Force officers today are committed to supporting land operations and have proven willing to allocate very large portions of the overall air effort to this task, they still do not trust the Army on its own to employ airpower properly. And they are extremely reluctant to cede operational control of their instrument to nonairmen.¹⁵⁷

The issue of the control of airpower is a source of friction with the other services as well. While Joint doctrine states that in a Joint environment, "The JFACC should be the service component commander with the preponderance of forces to be tasked and the ability to plan, task, and control joint air operations,"¹⁵⁸ it is clear that the Air Force expects to lead in that role as evidenced by the passage below from Air Force doctrine (Air Force Basic Doctrine Vol 1 - JFACC).

Historically, when Air Force forces have been attached to a joint task force (JTF), the commander, Air Force forces (COMAFFOR) has normally been dual-hatted as the joint force air component commander (JFACC), not merely due to preponderance of forces but also due to the ability to command and control airpower through an air operations center (AOC), which forms the core of the JFACC's joint AOC (JAOC). This is why the COMAFFOR trains to act as the JFACC. The instances when sizeable Air Force forces have been present in a JTF, and the COMAFFOR has not been the JFACC, are very rare.¹⁵⁹

The need for centralized control of airpower is a doctrinal tenet of the Air Force.

Air Force Basic Doctrine Vol 1–Tenets of Airpower:

Because of airpower’s unique potential to directly affect the strategic and operational levels of war, it should be controlled by a single Airman who maintains the broad, strategic perspective necessary to balance and prioritize the use of a powerful, highly desired yet limited force. . . . Centralized control empowers the air component commander to respond to changes in the operational environment and take advantage of fleeting opportunities.¹⁶⁰

Thus for the Air Force, based on the above excerpts from their doctrine, Airpower should be centrally controlled by the JFACC, who generally will come from the Air Force.

Clearly, the potential for friction with the Navy and the Marine Corps exists (the Army has not historically provided air assets to the JFACC). Even if the other services were to agree to the Air Force doctrinal tenets just described, there would be friction if: the other services were not willing to give up sufficient “excess” sorties; the services did not agree with the assigned tasking of their aircraft; or (as is often the case with the Army), the JFACC’s support to maritime or land components was complicated by service specific paradigms, e.g. battlespace management and control authority within a component’s AO.

Case Study–Air-Sea Battle: Cultural Bridge or Friction Point?

In the *Capstone Concept for Joint Operations: Joint Force 2020* (CCJO), the Chairman of the Joint Chiefs of Staff, General Martin Dempsey states:

Our nation and our Armed Forces are transitioning from over a decade of war to a future that presents us with a security paradox. While the world is trending toward greater stability overall, destructive technologies are available to a wider and more disparate range of adversaries. As a result, the world is potentially more dangerous than ever before.¹⁶¹

He further states, “New concepts of operation are needed to address the security paradox we face.”¹⁶² One example of such a new concept is Air-Sea Battle (ASB). And

in an ironic twist, though this concept was intended to facilitate synergy and integration between all the services, ASB has revealed itself to be a paradox in itself by simultaneously facilitating and hampering cross-domain synergy and service integration. While bridging the cultural divide between the Air Force and the Navy, it has also revealed cultural barriers to the other services (most notably the Army), in Joint collaboration.

The Air-Sea Battle Concept

The concept of Air-Sea Battle (ASB) was developed by the Air Force and the Navy at the direction of the Secretary of Defense Robert Gates in July 2009. The concept addresses the challenge of ensuring access in the global commons despite Anti-Access and Area Denial (A2/AD) challenges.¹⁶³ While the initial exclusion of the Army in the development of the plan had caused some backlash from landpower advocates,¹⁶⁴ ASB has become part of the larger Joint Operational Access Concept (JOAC). “At its core, the Air-Sea Battle Concept is about reducing risk and maintaining U.S. freedom of action and reflects the services’ most recent efforts to improve U.S. capabilities . . . [ASB] seeks to better integrate the services in new and creative ways.”¹⁶⁵

ASB can be described as an evolution of the Air-Land Battle doctrine that was developed to counter the Soviet Land threat in Europe during the 1970s and 1980s. But instead of focusing on the land domain, ASB “integrates operations across all five domains to create an advantage.”¹⁶⁶ The concept supports the new Defense Strategic Guidance- *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense*, that was released by the President and the Secretary of Defense in 2012, calling for the U.S. military to project power despite A2/AD challenges. That year, all four of the services

signed a memorandum of understanding establishing a framework for implementation of ASB.¹⁶⁷

Air-Sea Battle mitigates access challenges by moving beyond simply de-conflicting operations in each war fighting domain, toward creating the level of domain integration necessary to defeat increasingly varied and sophisticated threats. —Secretary of Defense Leon Panetta, February, 2012

Perceived Threat to the Landpower Mission

However, to the dismay of some landpower advocates, the U.S. strategic “Pivot to Asia,” implies the ASB concept will likely be more of a joint venture between the Air Force and the Navy due to the nature of the operational environment in that part of the world. This has increasingly become an area of friction between the services as evidenced by the quote below from an article in the Armed Forces Journal.

As a service [the U.S. Army] with a limited presence in the air and on the sea, this is all a little nerve-wracking. How does an organization that projects land power contribute usefully to an off-shore doctrine and a defense focus on the waters around the Chinese coast? . . . it is land power, and land power alone that can bring America’s Asia policy back to reality.¹⁶⁸

This, despite the fact that ASB is not strategy nor doctrine but a concept that addresses an important but specific joint issue- A2/AD.¹⁶⁹

The basis of the landpower argument lies in the perception that ASB will undermine lessons learned in the last 12 years of war in Iraq and Afghanistan in areas led by ground forces such as Counter-Insurgency (COIN) and Stability operations. In their view the U.S. would be “making the same mistake it made after the Vietnam War.”¹⁷⁰ This perception is served by the following quote from the latest Defense Strategic Guidance. “[The U.S. will] reduce the demand for significant U.S. force commitments to stability operations. U.S. forces will nevertheless be ready to conduct limited counterinsurgency and other stability operations if required.”¹⁷¹ Thus, the root of the

friction it seems is not in the suitability of the ASB concept to address the A2/AD challenges in the future but the threat it poses to the Army's mission and budget in the years to come.

Perhaps, in response to the ASB concept and its perceived threat to the landpower mission, the Army Chief of Staff along with the Commandant of the Marine Corps and the Commander of Special Operations Command (SOCOM), released in October of 2013, a white-paper titled *Strategic Landpower: Winning the Clash of Wills*. In it they state:

After ten years of war, the Nation is rebalancing its national security strategy to focus on engagement and preventing war. Some in the Defense community interpret this rebalancing to mean that future conflicts can be prevented or won primarily with standoff technologies and weapons. If warfare were merely a contest of technologies that might be sufficient. However...[armed conflict] is fundamentally a human endeavor . . . Operations in the land domain are most effective at achieving the human outcomes that are a prerequisite for achieving national objectives. . . . Even if one focuses on the difficult challenges presented by China, the value of landpower remains apparent. . . . The Air Force and the Navy obviously have a crucial role in this arena. . . . Still those efforts must be complimented by forward engaged and creatively employed Soldiers, Marines, and Special Operations Forces.¹⁷²

The paper further stresses the importance of the "human domain" and how it, along with the cyber and land domains should be the focus of "joint application of military power" to aid in achieving national objectives.¹⁷³ Implied throughout the white-paper is the notion that the Air Force and the Navy do not deal with the "human domain"; a notion that these services would likely dispute. This belief in the preeminence of the land domain (and "human domain") is a cultural espoused belief of the Army as previously stated in the Cultural Primer section of this thesis.

The Air Force and the Navy: From Deconfliction to Integration

While the friction over ASB is quite telling of the cultural divide between the landpower advocates and the other services, the current synergistic relationship between the Air Force and the Navy, particularly Naval Aviation, serves as a model for Joint Integration. This is evident in their seamless combat performance during the most recent wars in Iraq and Afghanistan.¹⁷⁴

The Air Force-Navy relationship has not always been this amicable however. During the Cold War, the two services remained worlds apart—physically, culturally, and conceptually. Benjamin Lambeth from the RAND Corporation, authored an article in the *Naval War College Review* in 2008 titled “Air Force-Navy Integration in Strike Warfare: A Role Model for Seamless Joint Operations.” His article details the twelve year process of how the Navy effectively changed its culture from the Cold War mindset of working independently in the open ocean to engage the Soviet Fleet, to that of working synergistically with the Air Force in the littorals and over-land in support of Joint operations in Iraq and Afghanistan. His insights are provided below in an effort to paint a picture of “what right could look like” for Joint Integration.

Lambeth:

For more than two centuries the Navy was proudly accustomed to operating independently on the high seas, with a consequent need to be completely self-reliant and adaptable to rapidly changing circumstances far from the nation's shores, with the fewest possible constraints on its freedom of action. The nation's sea service was forward deployed from the beginning of its existence and, throughout most of the Cold War, was the only service that was “out there,” in and above the maritime commons and ready for action. Largely for that reason, operations integration between the Navy and Air Force was not even a remote planning consideration. On the contrary, the main focus was rather on force deconfliction between the two services. Not only figuratively but also literally, the Navy and Air Force conducted their daily routines in separate and distinct operating environments, and no synergies between the two services were

produced—or even sought. Not surprisingly, a unique Navy operating culture emerged from this reality that set the Navy clearly apart from the Air Force and its more structured and rule-governed way of conducting its missions.¹⁷⁵

Lambeth then provides examples of the effects of divergent cultures in the Air Force and Naval Aviation.

In telling testimony to this divide, Air Force pilots who participated in joint peacetime training exercises with their Navy counterparts during the early post-Vietnam years were often heard to tell horror stories about such (to them) cavalier and undisciplined Navy practices as last-minute unannounced changes in flight schedules, controlling agencies, radio frequencies, operating areas, or even mission profiles. For their parts, Navy pilots who flew in similar joint training exercises routinely complained that overly rigid adherence to maintenance, operation, and crew-rest requirements greatly hampered the Air Force's ability to be fully flexible in executing its assigned missions.¹⁷⁶

The above sentiment is succinctly summarized with the following adage that is spoken even to this day. “An Air Force “Dash-1” (operator’s manual) tells the pilot what he CAN do while a Navy “NATOPS” tells the pilot what he CAN’T do (or shouldn’t do unless there is a good reason).” This cultural divergence is also evident when comparing the service’s approaches to Mission Command as stated earlier in this chapter, i.e. Air Force—Centralized Control, Decentralized Execution vs. Navy—Command by Negation. (Additional anecdotal examples of the cultural differences between the two services can be found in Appendix E.)

The watershed moment for the Navy came after Operation Desert Storm in 1991, when it discovered that its way of warfighting was no longer valid in the post-Cold War era.

There were no opposed surface naval forces or enemy air threat to challenge the Navy’s six carrier battle groups that participated in that war. Moreover, throughout the five-month buildup of forces in the region that preceded the war and the six weeks of fighting that ensued thereafter, the Navy did not operate independently, as had been its familiar pattern throughout most of the Cold War,

but rather in shared operating areas with the Air Force, Army, and Marine Corps.¹⁷⁷

Additionally, the Navy had difficulty integrating with the Air Force. For example, there was no compatible C2 system between the Navy and the Air Force, and as a result, hard copies of the Air Tasking Order (ATO) had to be flown each day aboard S-3 aircraft to each of the six carriers. There would also be additional integration issues including the Navy's lack of precision strike capability and the lack of friendly-force identification equipment required for the congested air-space over Iraq.¹⁷⁸

No longer could the Navy avoid integrating with the other forces. Future naval battles would be fought in the littorals and as part of a Joint force. As stated earlier, Schein defines Organizational Culture as “a pattern of shared basic assumptions learned by a group as it solved its problems of external adaptation and internal integration, which 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.”¹⁷⁹ The basic assumptions the Navy had developed during the Cold War were no longer valid, and as a result cultural change would soon follow.

For the Navy, more than any other service, Desert Storm was the midwife of change. . . . [The war] confirmed the operational doctrines that the Army and Air Force had developed over the previous two decades, but it also demonstrated that the Maritime Strategy—the basic operational concept driving Navy planning since the early 1970s—did not fit the post-cold war era.—Admiral William A. Owens¹⁸⁰

The Navy quickly made the necessary changes in weapons and equipment—they now had precision strike capability with laser guided bombs and the AGM-84E Standoff Land Attack Missile (SLAM); and with upgrades to its C2 systems, could now receive the ATO electronically on ships. Doctrinally, the Navy began to value strategic air

campaigns and strived to become more influential players in them, as evidenced in their new strategy “From the Sea,” that emphasized power projection ashore while working jointly with the Army and the Air Force.¹⁸¹

Naval aviation must see itself as a component part of the full airpower thenation can bring to bear on military problems, especially in support of land and air campaigns.—Admiral William A. Owens

The following ten years during Operations Northern Watch and Southern Watch would be credited as the single most influential factor in bringing the Air Force and the Navy together. The continued real-world operations proved to be a crucible in which their integration in Strike Warfare was forged. “By conscious choice, both services sent their best tacticians and intelligence officers to serve temporary-duty assignments in the supporting Coalition Air Operations Centers (CAOCs) in Turkey and Saudi Arabia, working together in the joint planning and execution of those nonstop air operations over Iraq.” As a result of deliberate leadership in both services, mutual trust would develop and relations became more seamless and transparent.¹⁸²

Following the terrorist attacks on 9/11, the Air Force-Navy partnership would continue to develop and provide synergies in Afghanistan and Iraq during Operation Enduring Freedom and Operation Iraqi Freedom respectively. Navy fighters escorted Air Force bombers. Air Force tankers fueled Navy fighters. And Navy electronic attack aircraft provided electronic jamming for Air Force strike missions. During OIF when Iraq launched ballistic missiles at Kuwait, a Navy destroyer transmitted launch point information to two Air Force F-16s that successfully destroyed the launchers. In another example, an Air Force E-8 (JSTARS) aircraft used its dynamic retasking tool to direct and redirect Navy strike aircraft during a three day sand-storm. (Figure 17 shows the

attributes of different forms of airpower and how they support one another.) And for the first time, naval aviators held key positions in the traditionally Air Force dominated roles in the CAOC, including Rear Admiral Nichols as the Deputy CFACC.¹⁸³

ATTRIBUTES OF DIFFERENT FORMS OF AIR POWER

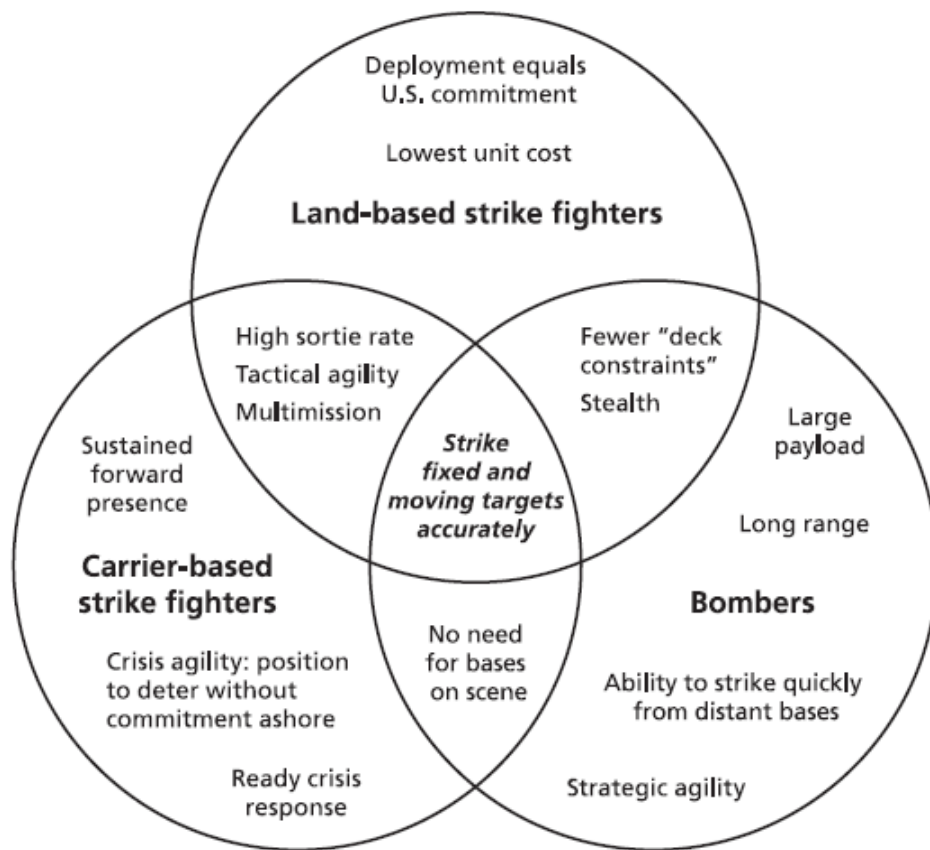


Figure 17. Attributes of Different Forms of Air Power

Source: Reproduced from Benjamin S. Lambeth, *Combat Pair: The Evolution of Air Force-Navy Integration in Strike Warfare*, MG-655-AF (Santa Monica, CA: RAND Corporation, 2007), xi, 83

There would be additional efforts in Air Force-Navy integration. From a leader-development perspective, future Navy Carrier Air-Wing Commanders would routinely

spend a hundred days forward deployed with the Air Force in the CAOC in Qatar for Joint Air operational planning familiarization before assuming command. Additionally, they would attend the Air Force's strike planning course and the CFACC and JFACC courses at Maxwell Air Force Base.¹⁸⁴ This was "not just a matter of the Navy's accommodating to the Air Force," states Lambeth in his article. The Air Force would adopt to the Navy as well by utilizing their concept of "Network Centric Warfare." Through the use of Link-16 and other advanced C4I systems, the two services further enhanced interoperability with each other and the rest of the Joint Force.¹⁸⁵

According to Schein, culture is learned by experience or education.¹⁸⁶ Meaning, if cultural barriers exist within an organization, they are often self-imposed by their own teachings and doctrine. The Air Force and the Navy have partnered to overcome this self-limitation by encouraging partnerships at the lowest possible level—flight training. The idea being that by encouraging collaboration and learning each others cultures early, there would be less tendency for friction and misunderstandings later on in their careers. Exchange programs set up between the services allowed select student Naval Aviators to attend Air Force Undergraduate Pilot Training (UPT), and vice versa. Additionally, some squadrons were fully integrated with equal numbers of Navy/Marine and Air Force instructors creating the unique situation where an Air Force officer would command a Navy training squadron and vice versa.¹⁸⁷ This arrangement is confirmed by this author's own experience as an instructor pilot at Training Squadron 35 (VT-35) between 2009-2011, where he not only instructed Air Force, Navy, and Marine student aviators, he also had an Air Force commanding officer and a Navy executive officer (the roles would switch between services every year).

In addition to undergraduate pilot training, the services have created collaboration and exchange opportunities at each other's test pilot programs, weapons schools, and in major joint exercises like Red Flag, Valiant Shield, and others. To give an appreciation of the scale of Valiant Shield, the Joint maritime and air exercise in 2006 consisted of 22,000 personnel, 280 aircraft, and 30 ships (including 3 aircraft carriers). It was the "largest military exercise conducted in Pacific waters since the Vietnam War."¹⁸⁸

Twenty-three years ago, the Navy and the Air Force remained worlds apart—physically, culturally, and conceptually and the best they could have hoped for was mere deconfliction of their operations. As a result of the continuing integration between the two services since Desert Storm, the concept of Air-Sea Battle has become a reality. The Navy in particular made the biggest cultural change by giving up some of its valued independence and stature in order to better integrate with the Air Force and future Joint operations. There were friction points along the way to be sure, but they were inconsequential and minor when compared to the great strides the services have made towards interoperability and cross-domain synergy.

Conclusion

This case study presented Air-Sea Battle in the context of the new Joint concept for Joint Force 2020. The analysis revealed that despite its good intentions, ASB has exposed cultural barriers between the landpower forces (most notably the Army), and the Navy and Air Force. Additionally, this study highlighted the cultural change the Navy experienced after Desert Storm as a result of its outdated Cold War paradigm. Because the Navy no longer felt their basic underlying assumptions were valid, (particularly in its

use of Naval Aviation), their leadership not only supported but led the cultural change that would enable better integration with the Air Force.

Barriers Identified

Based on the preceding research, the following barriers are provided for consideration in the development and execution of the CCJO–Joint Force 2020. While certainly not all inclusive, they focus on the primary cultural barriers that prevent Mission Command, Cross-domain Synergy and Flexibility in Establishing Joint Forces—three elements of the GIOs in the Joint Force 2020 concept. The barriers are: (1) Threats to Service Missions, (2) Threats to Service Identity and Independence, (3) Threats to Service Budgets, and (4) Institutional Inertia / Engines for Stability.

Threats to Service Missions

A key aspect of the Joint Force 2020 concept is that it espouses innovation and integration to overcome the challenging fiscal and the dynamic strategic environments the US will face in the future. With the “strategic pivot to Asia” and per the latest Defense Strategic Guidance, not only is the expectation that the U.S. will depart from the type of stability operations it has conducted in Iraq and Afghanistan, there will be new challenges in the form of cyber warfare, non-state actors and A2/AD challenges.¹⁸⁹ A risk in pushing for increased integration and innovation is that some services may perceive this to be a threat to their traditional service missions, as witnessed in the Air-Sea Battle case study.

Organizations fight hardest when they feel that their core mission is being challenged. The organization will favor policies which promote the core mission. It will fight for autonomy in performing that core mission, and it will seek to defeat any challenges to those functions it associates with its core. It will be

largely indifferent to functions it sees as peripheral to its core, even if those functions are part of its assigned purpose. Finally, it will try to push out, or reject accepting, non-core missions as possible detractors from its core focus.¹⁹⁰

In addition to the Air-Sea Battle and the Strategic Landpower concepts discussed in the earlier case study, an additional potential friction point in the Core Mission arena includes the threat to the Marine Corps mission (as the “first to fight”), with the Army’s new Regionally Aligned Forces concept and their experimentation of landing their Blackhawk helicopters on Navy ships.

Wall-Street Journal, July, 2013:

In April, an Army Maj. Gen. said in a speech that basing helicopters on Navy ships could “be our ticket for the future.” The Army, he added, must not concede the mission to the Marines. . . . The Corps returned fire. “If anyone wants to spend money to duplicate our capability, just give it to us instead as we already know what we are doing.”¹⁹¹

In early May, Gen. Ray Odierno, the Army chief of staff, said his service must maintain its capabilities to deploy quickly and act with overwhelming force in the opening days of a conflict. “We provide depth,” he said. “The Marines know that. They're not built for that.” . . . At a speech in Washington later that month, Gen. James Amos, the Marine commandant, said, “Just the same way America doesn't need a second land army, America doesn't need a second Marine Corps.”¹⁹²

Perceived threats to service mission are an influence of service culture and parochialism. The cultural primer section provided earlier in this thesis presented examples of how each of the services hold their respective domains and missions in esteem when compared to the other services. While this type of attitude may be helpful in competition, it poses a barrier when the objective is Joint integration.¹⁹³

Threats to Service Identity and Independence

Another barrier stems from the perceived threat to service identity and independence. Case in point is the fact that it took the Air Force and the Navy 44 years

after the National Defense Act of 1947 to even begin thinking about integrating their airpower, requiring a major watershed moment like Desert Storm for the Navy to begin the process. Even today, 28 years after the Goldwater Nichols Act mandated “jointness,” individual service cultures trump Joint culture. Dr. Smith explains, “Even after Goldwater-Nichols and congressionally mandated jointness, the JCS lacks most of the components of culture building. It selects officers already socialized into their service cultures, those services continue to be responsible for paying and promoting those officers, and they ultimately return to their service for follow-on assignment.”¹⁹⁴

An argument for maintaining service integrity and independence is the negative effect integration could have on service capabilities and innovation. Builder states, “A collective shared sense of identity and interests is a hallmark of the most successful institutions.”¹⁹⁵ In his monograph for the School of Advanced Military Studies (SAMS), MAJ James Davis, expounds on that school of thought while addressing the cultural issues related to implementing the Joint Vision 2020 concept released in 2000.

Some fear that a strong joint culture will weaken the service cultures and thus degrade their capabilities. Others feel that a strong joint culture will reduce the competitive spirit between the services necessary to produce innovation, growth and prevent stagnation.¹⁹⁶

This sentiment is evident in all the services but most evident in the Marine Corps. As earlier revealed in the cultural primer section of this thesis and in the examination of the Marine’s views on airpower, they are a service with a strong identity that prefers to fight independently. Their formula as an independent combined arms team with their own air, land, and naval assets has brought them success in the past and the Marines will fight hard to keep it that way.

As for the argument that a strong joint culture will hinder innovation, one need not look further than the much maligned development of the Joint Strike Fighter (F-35). In an effort to reduce development costs in replacing the Air Force's F-16, the Navy's F/A 18, and the Marine Corp's AV-8B, a common platform was developed with an allowance for variations for each of the services, e.g. Vertical Take-Off and Landing (VTOL) for the Marines. By putting all the services' proverbial "fighter eggs" in one Lockheed Martin basket, this in effect shut out competition and the innovations that could have come with it. Consequently, the program is seven years behind schedule, has been plagued with issues, and is 70 percent over budget- currently at \$392 Billion. All told, "the Pentagon estimates total long term operating costs will be over \$850 Billion," making it the costliest weapons program in US history.¹⁹⁷

Perhaps there is no example of service opposition to losing its identity, more visible than the recent battle over uniforms. Ironically, despite the push for more integration and jointness, the military services went from two camouflage patterns (woodland and desert) in 2002 to ten patterns in 2013. And despite the current austere fiscal environment, it is estimated the services have spent at least \$12 Million on developing their own camouflage uniforms, not including the millions more for distribution.¹⁹⁸

The Marines started the uniform battle by developing their own woodland and desert camouflage uniforms that would stand them out from the other services with a brand new "MARPAT" digital design. "The people who saw this uniform in a combat area would know [the wearers] were United States Marines, for whatever that might mean," said Marine Gen. James L. Jones, who initiated the uniform design. The Marines

did not intend to share the new designs with the other services, spurring a costly uniform battle with the Army, Navy, and Air Force.¹⁹⁹

Interestingly enough, each of the other services have had their fair share of criticism about their new uniforms, coming from within their own service. The Army Combat Uniform (ACU) was meant to be universal but did not blend well with their environment in Iraq and Afghanistan. The Air Force, notwithstanding the fact that only a subset of their personnel fought on the ground, introduced a throw-back “tiger stripe” style from the Vietnam days which did not blend well with the environment either. The Navy thought it had the right idea by implementing a blue Navy Working Uniform (NWU) that replaced several other uniforms, but ultimately ended up with a uniform that was not fire-retardant (and could not be worn on ships), and sailors complaining the blue “aquaflage” didn’t blend with anything except the water, which is the last thing they would want.²⁰⁰

The Navy also introduced an expeditionary camouflage uniform for the desert which the Marines objected to because it looked too similar to their desert MARPAT. At a senate hearing in 2010 on the subject, the Commandant of the Marine Corps, General Amos stated “It’s a point of pride, sir. It’s internal pride.”²⁰¹

Figure 18 shows some of the unique camouflage uniform designs of each of the services.



Figure 18.
Camouflage Uniforms of the Different Services

Source: Army ACU—www.army.mil; Navy NWU—www.navy.mil;
AF ABU—www.defenseindustrydaily.com; Marine MARPAT—www.wikipedia.org
(accessed May 8, 2014).

Threats to Service Budgets

The current fiscal environment has been one of the principal driving forces behind the efficiencies called for in Joint Force 2020. But just as austerity is a call to action for integration and cross-domain synergy, the threat to individual service budgets can act as barriers against partnership and change. As a result of the fiscal environment and the Budget Control Act of 2011—also known as “Sequestration,” the Department of Defense has been scrambling to deal with the \$500 Billion across the board cuts it will need to implement over ten years- this in addition to a previously planned \$470 Billion cut. As a result, the Army has announced plans to cut troop levels to the lowest levels since before World War II; the Marines are following suit with their own troop cuts; the Air Force in

addition to cutting personnel are looking to divest its U-2 and A-10 aircraft; and the Navy has retired half its cruiser fleet and has proposed going to a 10 carrier navy.²⁰²

General Dempsey in his CCJO states:

Joint Forces must also adapt to the nation's fiscal environment. Though some key capability areas will see increased investment, the cumulative impact of retrenchment in defense accounts will be reduced capacity in terms of overall force structure.²⁰³

Thus, services will be expected to make hard cuts to force structure while competing for funding where there will be increased investments- most notably in technology. The recently released Quadrennial Defense Review of 2014 (QDR) acknowledges this fact:

Although the future force will be smaller, it will be ready, capable, and able to project power over great distances. Investment decisions will ensure that we maintain our technological edge over potential adversaries, and we advance US interests across all domains.—Secretary of Defense, Chuck Hagel²⁰⁴

In his assessment of the QDR, the Chairman of the Joint Chiefs of Staff states:

The QDR prioritizes investments that support our interests and missions, with particular attention to space, cyber, situational awareness and intelligence capabilities, stand-off strike platforms and weapons, technology to counter cruise and ballistic missiles, and preservation of our superiority undersea. . . . The QDR force takes risk in the capacity of each service but most notably in land forces.

It seems the concern of landpower advocates is well warranted. Not only are they forced to reduce Army troop levels to the lowest since before World War II, the senior leadership at the Joint Chiefs of Staff and the Secretary of Defense himself are calling for increased investments in technological areas where the Air Force and the Navy have traditionally dominated while taking risk in the land mission. As was stated in the cultural primer section of this thesis, traditionally “the Army and the Marine Corps equip the man, while the Navy and the Air Force man the equipment.” The competition for

resources is already visible when observing the dispute over Air-Sea Battle and Strategic landpower as highlighted in the case study.

Clashes between the services are inevitable when they compete for funding within the consolidated Department of Defense budget process. In fact, one classic view of interservice rivalry held that the intensity of the clashes was inversely related to the size of the budget. . . . Services do compete for dollars and support for their core programs, and this competition can be intense in times of fiscal constraint.²⁰⁵

The following excerpt from the Wall Street Journal article written in July of 2013 highlights the potential for service clashes over a shrinking defense budget. While funding for the services has stayed relatively constant in relation to each other since the Vietnam War, the percentage of allocation may change based on changing missions, thus heating up the conflict.

Wall Street Journal:

The emerging debate is expected to be the most intense in two decades as the branches of the military seek to retool their missions to match the needs of future conflicts. . . . The formula for U.S. military spending has been constant for much of the time since the Vietnam War: The Air Force has claimed about 30%, the Navy and Marine Corps together between 30% and 35% and the Army claimed roughly 25%, though its share increased during the Iraq and Afghanistan wars. But if the Pentagon changes the missions assigned to each service, so too might their share of military spending change, heating up the conflict.²⁰⁶

Finally, despite the current amicable relationship between the Air Force and the Navy, it is inevitable that there will be friction due to both services having a highly technological focus and thus will have to compete for the innovation funding mentioned in the QDR. As mentioned in the cultural primer, the Air Force worships at the altar of technology while the Navy is obsessed with it. Potential friction points have already revealed themselves. One area is in the development and control of drones. The Navy and the Air Force both have them but the Air Force has argued that costs could be reduced by allowing them to develop and manage the entire fleet of unmanned aircraft for all the

services. Another area of potential friction is in the ownership of the manned surveillance mission. The Navy currently has the newest and most advanced manned surveillance aircraft, i.e. P-8A, while the Air Force fleet is obsolete. This has the Navy arguing it could take over the entire manned surveillance mission, an idea the Air Force is skeptical of.²⁰⁷ This potential friction in the technology arena can be explained by the insights below.

Organizations which employ expensive capabilities in pursuit of their core mission are especially sensitive to budgetary changes and challenges. New technologies can also serve as a catalyst for budgetary conflict, particularly when that new technology and its application are also being sought by a budgetary or mission rival.²⁰⁸

Thus, while the threat to the overall Defense budget as a result of sequestration may act as a driver for the changes called for in Joint Force 2020, it also acts as a barrier to change when applied to the individual services. Service culture trumps Joint culture, and when called to make difficult choices between joint integration and service survival, the service will likely win. As Builder states, “the most powerful institutions in the American national security arena are the military services-the Army, Navy, and Air Force- not the Department of Defense or Congress or even their commander in chief, the president.”²⁰⁹

Institutional Inertia / Engines for Stability

Institutional inertia can be defined as “the relative absence of innovation or change due to the accumulation of policies, regulations, practices, and customs over time.”²¹⁰ It is a product of an organization’s culture and is very difficult to overcome, as noted in the passage below.

One of the most compelling [examples of the pervasive power of institutional inertia] was the way senior ranks in world navies resisted the transition from sail to steam in the mid-nineteenth century. One would think the superior speed,

maneuverability and reliability of ships driven by steam-powered locomotion would be obvious. Rather amazingly to later generations, men whose professional experience was exclusively shaped in the age of sail often refused to recognize this. Such was the power of institutional inertia, and its power remains largely undiminished to this day.²¹¹ — David Rowe

Builder coins the term “Engines for Stability” when explaining this phenomenon. He uses the example of the Air Force wanting to keep developing the next generation of Intercontinental Ballistic Missiles (ICBMs) during the Cold War despite resistance from the Department of Defense and Congress who said the current model was sufficient. He also details how the Navy and the Air Force pushed back on integrating the modern cruise missile into their strategy due to the threat it imposed to their core missions.²¹²

When the cruise missile advocates suggested to the Air Force that the new missiles might be carried by big, manned airplanes to a safe point outside the enemy’s defenses and then launched toward their targets, one SAC colonel reminded them that SAC was not about to abandon its intention to fly over the targets, open the bomb-bay doors, and watch the bombs fall until they detonated. The imagery of World War II was alive and well- twenty years later.²¹³

Examples of modern-day institutional inertia/engines for stability abound when examining the services. They are found in their doctrine, mission, vision, and even in the areas in which they choose to innovate. It is the reason why the Army continues to train for large-scale ground campaigns despite having no near peer threat and despite their experience with counter-insurgency and stability operations in Vietnam, Iraq, and Afghanistan; It is the reason why the Navy continues to invest in expensive aircraft carriers despite their vulnerability to mines and anti-ship missiles, or why they are devoted to nuclear submarines despite the availability of the cheaper, and quieter Air Independent Propulsion (AIP) diesel-electric submarines; It is the reason why the Marine Corps maintains its strong service identity and is wary of Joint integration; And finally,

institutional inertia is the reason why the Air Force invests in expensive bombers and fifth generation fighters despite having no near-peer competitor.

Builder explains:

Many who choose a particular military institution and dedicate their lives to it make their choice because there is something about the service—who it is or what it is about—that appeals to them. They see something in that service attractive or admirable and make an implicit contract with that service to serve in exchange for the associative benefit they perceive. If impending changes in their service then threaten that which they found attractive, they will exert a resorting or stabilizing pressure. With tens or hundreds of thousands of such implicit contracts outstanding, the potential for voluntarily changing the institution is very small. Significant, rapid change is almost certain to be imposed from the outside and vigorously resisted from the inside.²¹⁴

In short, the services will want to keep doing what they are good at (or known for) despite calls for change. The challenge with overcoming institutional inertia is that unlike the first three barriers in which the amount of resistance can be mitigated by reducing the perceived threat to the service, it requires a cultural change led from within the organization to affect not only the beliefs, values, and basic underlying assumptions of its membership but also its policies, regulations, practices, and customs. This type of cultural change is not easy and according to Dr. John Kotter, a well-respected Leadership professor at Harvard Business School, “70% of all major change efforts in organizations fail.”²¹⁵

Secondary Research Question

What methods for dealing with change that are used by civilian organizations can be tailored to address the cultural issues unique to the military?

The potential barriers to Joint Force 2020 will stem from the increased integration of the individual services, each with very strong and unique cultures. While six methods

for cultural change were reviewed in chapter 2, only the Force Field Analysis (FFA), Cultural Planning for Mergers and Acquisitions, and the Chaos Imperative were selected for analysis. The other models - The Competing Values Framework, Kotter's 8-Step Change Model, and the 6 Cultural Levers- will not be analyzed due to their focus on internal culture change while neglecting external interaction.

Force Field Analysis

The Force Field Analysis is a popular decision making tool for businesses but does not specifically address organizational culture or methods to change it. The FFA provides an illustration of a current change initiative along with all the driving forces and restraining forces that act upon it and allows the decision maker to choose to strengthen the driving forces, weaken the restraining forces, or abandon the initiative altogether.²¹⁶ Figure 19 is the author's attempt at using the FFA model based on the earlier cultural analysis to illustrate the current situation in regards to the CCJO.

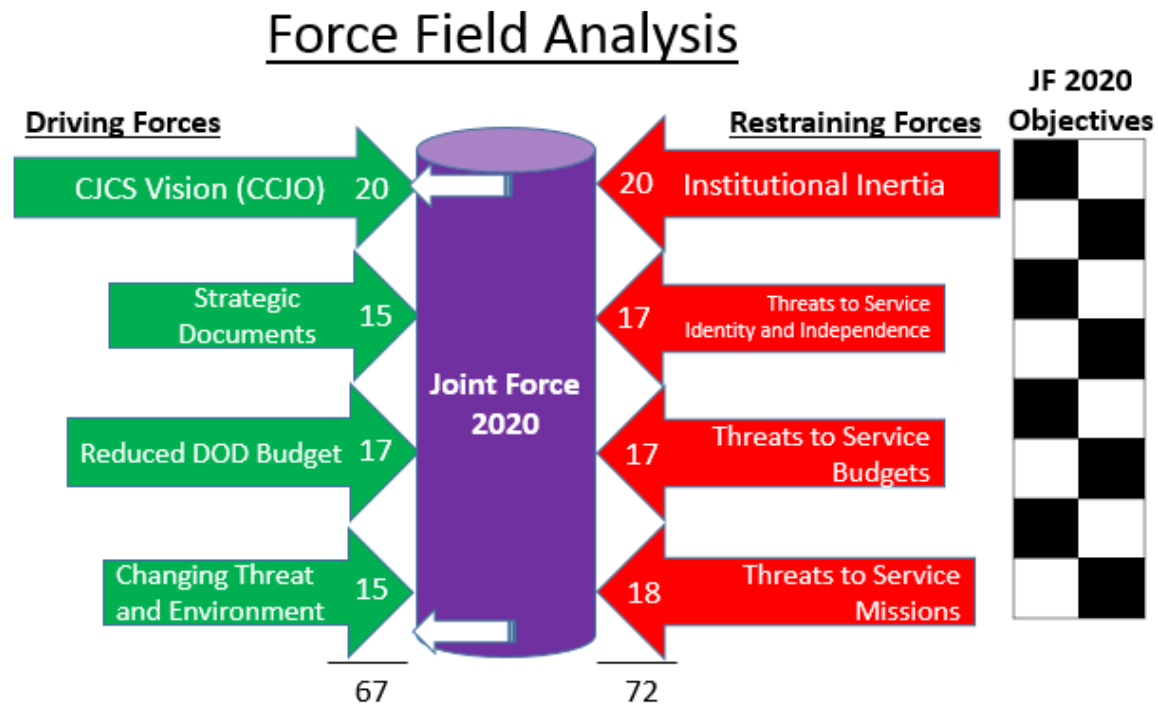


Figure 19. Force Field Analysis

Source: Created by author

Based upon the above analysis, the Joint Force 2020 initiative fails to meet its objectives due to the restraining forces being greater than the driving forces. Senior strategic leaders will need to strengthen the driving forces or weaken the restraining forces in order for Joint Force 2020 to be successful.

Culture Planning for Mergers and Acquisitions

In the corporate world, nearly 75 percent of all mergers fail to achieve their desired financial or strategic objectives. In order to improve the likelihood of success, organizations must analyze and plan to integrate their cultures in order to realize the sought after synergies and achieve their desired goals.²¹⁷ Senior strategic leaders can

utilize the concepts found in Marks and Mirvis book *Joining Forces: Making One Plus One Equal Three in Mergers, Acquisitions, and Alliances* to help overcome the inter-service cultural barriers to Joint Force 2020.

Prior to creating a new Joint organization or concept, (e.g. a new Joint Task Force, Functional Combatant Command, or concepts like Air-Sea Battle and Strategic Landpower), senior strategic leaders should conduct culture planning as recommended by Marks and Mirvis. This includes selecting the appropriate combination based on the level of investment, control, impact, integration, and pain of separation desired (see figure 7).

Next, a cultural planning checklist should be followed during the pre-combination, combination, and post-combination phases (see Appendix F). During this process, select elements of culture can be chosen to either retain, integrate, or change based on what is best for the newly formed organization. (see figure 8). By directly addressing the cultural friction points and barriers, senior strategic leaders can mitigate the resistance to implementing new concepts or integrating organizations.

This deliberative planning process for addressing cultural issues between the services is necessary to mitigate the primary service barriers identified earlier in this chapter. If the dismal corporate success rates of mergers and acquisitions is any indication (near 25 percent)²¹⁸, it would be incumbent upon the Joint community to heed the lessons of corporate mergers and incorporate organizational culture planning into all of its endeavors.

The Chaos Imperative

The strongest restraining force identified in the FFA is that of institutional inertia. As indicated earlier, while the other barriers can be mitigated by removing the perceived

threats to mission, identity, independence, and budget, the cultural barrier of institutional inertia requires difficult cultural change. And if Kotter's assessment that "70% of all major change efforts in organizations fail"²¹⁹ is correct, then an innovative solution to overcoming deep rooted cultural barriers must be explored.

In his book *The Chaos Imperative*, author Ori Brafman suggests using controlled chaos to help innovate and enable cultural change. General Dempsey used his methods to overcome a rigid hierarchy in the Army by instituting the Red Team University.²²⁰ Brafman's method for harnessing chaos is revisited below with suggestions from this author (*in italics*) on how it can be utilized to overcome the institutional inertia barrier to Joint Force 2020.

Create Whitespace. The allocation of unstructured time or unassigned resources to allow for creativity and inspiration.

Whitespace can be created by opening up a small percentage of assignments to other services. By doing so, Navy helicopter pilots could fly with the Army or the Air Force; Army field artillery officers could be fire control officers on Navy ships; personnel officers from the Air Force could work for the Army G-1.

Invite Unusual Suspects. Outsiders who are not part of the established order who have the ability to bridge disparate ideas from different organizations.

Utilizing the whitespace mentioned above, officers from different services can bring their knowledge and experience from their own service to provide a different and perhaps better way of doing things, and also bring back to their own service the practices learned from their cross-service experience. In this way, best practices from all the services will come forward and be accepted while the inferior practices will cease to be doctrine or standard operating procedure.

Plan for Serendipity. Setting the conditions for serendipity (innovation or inspiration) to occur by encouraging communication and collaboration of diverse groups.

This is the process of waiting to see what happens after creating the whitespace and inviting the unusual suspects mentioned above. Using a similar process, the Navy underwent a huge cultural shift in their relationship with the Air Force following Operation Desert Storm (see Air Sea Battle case study).

In order to overcome the service barrier of institutional inertia, controlled chaos, as advocated by Brafman should be considered. By creating whitespace, inviting unusual suspects, and planning for serendipity to occur, deep rooted cultural beliefs can be challenged, allowing for the culture gap between the services to narrow, thus enabling more effective Joint integration.

Summary and Conclusion

This chapter provided an analysis of the research in answering the primary and secondary research questions. A cultural primer was presented highlighting the individual services' strong and unique cultures and possible friction points. Then, case studies illustrated how these different cultures can breed different approaches to Joint concepts. Next, a case-study on Air-Sea Battle revealed how new Joint concepts can be affected by service culture and beliefs. Finally, possible solutions were analyzed in the context of the CCJO to overcome service barriers to its implementation. The next chapter will provide recommendations based on the findings of this research.

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¹⁰⁸Harvard, 133.

¹⁰⁹*Ibid.*

¹¹⁰*Ibid.*

¹¹¹*Ibid.*, 138.

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¹¹³*Ibid.*

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¹¹⁵Ibid.

¹¹⁶Ibid., 137.

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¹⁷⁶*Ibid.*, 29.

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¹⁷⁸*Ibid.*, 31.

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¹⁸⁰Lambeth, 31-32.

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¹⁸²*Ibid.*, 34.

¹⁸³*Ibid.*, 36.

¹⁸⁴*Ibid.*, 38.

¹⁸⁵*Ibid.*, 39.

¹⁸⁶Schein, 18.

¹⁸⁷Lambeth, 39.

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²⁰⁴Department of Defense, *Quadrennial Defense Review 2014* (Washington, DC: Government Printing Office, 2014).

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²⁰⁶Barnes.

²⁰⁷Ibid.

²⁰⁸Smith, 3-17.

²⁰⁹Builder, 3.

²¹⁰Adrian Pavia, “Confronting Institutional Inertia,” <http://www.govloop.com/profiles/blogs/confronting-institutional-inertia> (accessed April 3, 2014).

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CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

Introduction

The CCJO lays out a vision for the individual services to embrace Joint integration and collaboration despite clear cultural barriers that may make such cooperation difficult. If Joint Force 2020 is going to be the solution to accomplish the primary missions listed in the CCJO in an increasingly unpredictable, dangerous, and fiscally challenging security environment then it is important to recognize the primary service barriers to change and find solutions to overcome them. This chapter summarizes the findings of this study and provides recommendations based on the analysis conducted in chapter 4.

Summary of Research and Analysis

In an effort to identify the primary service barriers to change and find the solutions to overcome them, this study sought answers to the following two research questions:

1. What are the primary barriers within the military services that might impede Mission Command, Flexibility in Establishing Joint Forces and Cross-domain Synergy?
2. What methods for dealing with change that are used by civilian organizations can be tailored to address the cultural issues unique to the military?

Through an abductive process, where existing literature was reviewed and analyzed in the context of the CCJO, it was found that each of the services have

developed strong and unique cultures that have influenced their approaches to Joint concepts. Additionally, friction points were found during the cultural analysis of the individual services which have manifested as barriers to Joint integration. (see figure 20)

<u>Barriers to Joint Force 2020</u>
1. Threat to Service Missions
2. Threat to Service Identity and Independence
3. Threat to Service Budget
4. Institutional Inertia

Figure 20. Barriers to Joint Force 2020

Source: Created by author.

In searching for solutions for overcoming these barriers, several methods were found that have been proven effective in managing organizational culture. After a thorough review and analysis, the Force Field Analysis, Cultural Planning for Mergers and Acquisitions, and the Chaos Imperative were chosen based on their suitability to address the primary service barriers that are unique to the military. Based on the analysis of these methods in chapter 4, recommendations for overcoming the primary service barriers to Joint Force 2020 are provided below.

Recommendations

The FFA analysis in chapter 4 revealed that the primary service barriers to Joint Force 2020 are currently preventing successful implementation of the CCJO. In an effort

to overcome these barriers, three suitable courses of action will be provided based on the framework for Cultural Planning for Mergers and Acquisitions reviewed earlier in this thesis. This framework was chosen because of its scalability and suitability to address cultural issues between multiple organizations. Scalability was a factor because as stated in the CCJO:

[GIOs] require a globally postured Joint Force to quickly combine capabilities with itself and mission partners across domains, echelons, geographic boundaries, and organizational affiliations. These networks of forces and partners will form, evolve, dissolve, and reform in different arrangements in time and space with significantly greater fluidity than today's Joint Force.¹

The Mergers and Acquisitions approach to culture planning is scalable because the depth of the combination is influenced by: the amount of willing investment and risk by the participating organizations; the amount of control that is required (or desired); the amount of impact to the organizations after the combination; the level of integration required; and the pain of separation once the combination is no longer required or desirable (see figure 7).²

Additionally, each Course of Action (COA) is evaluated based on the above factors using the terms Suitability, Feasibility, and Acceptability as defined below.

1. Suitability--will its attainment accomplish the effect desired (relates to objective)? The COA is suitable if it meets the scalability requirements of the CCJO and it mitigates the primary service barriers to Joint Force 2020.
2. Feasibility--can the action be accomplished by the means available (relates to concept)? The COA is feasible if the amount of willing investment and risk by the participating organizations and the amount of control that is required (or desired) by the Joint Force Commander is tolerable to all those involved.

3. Acceptability--are the consequences of cost justified by the importance of the effect desired (relates to resources/concept)? The COA is acceptable if the amount of impact to the organizations after the combination, the level of integration required, and the pain of separation once the combination is no longer required or desirable is tolerable to those involved.³

All three of the following COAs are suitable for overcoming the primary service barriers to Joint Force 2020. This is because in addition to their scalability, the culture planning involved in Mergers, Joint Ventures, and Alliances take a balanced approach to organizational change in that it combines elements of cultural analysis as seen in the Competing Values Framework, elements of organizational vision and leadership espoused by Kotter, and elements of the more process oriented method of Young's Six Cultural Levers. Most significantly, it acknowledges the importance of cultural planning between combining organizations to enhance probability of success in achieving desired strategic and organizational objectives. Thus, an evaluation of Feasibility and Acceptability of each COA will be the key determinants in whether a COA is recommended for implementation.

Course of Action 1--Change the Culture by Merger

Dr. James Smith wrote in the 1998 Winter edition of the *Airman-Scholar* that the Joint community lacks the ability to develop their own culture or to change the culture of the individual services.

Certainly joint staff officers, those serving in joint staff billets, are working on issues involving close interservice cooperation. However, the joint arena is just that—it is not an organization but a forum for service interactions. Even after Goldwater-Nichols and congressionally mandated jointness, the JCS lacks most of the components of culture building. It selects officers already socialized into their

service cultures, those services continue to be responsible for paying and promoting those officers, and they ultimately return to their service for follow-on assignment. The joint training these officers do receive is important in laying a foundation for joint service, but it is insufficient to create a joint culture. The joint staff is simply a number of very capable staff officers working on integration issues even as they continue to represent the distinct services operating side-by-side. . . . Perhaps this is the best cooperation possible at the present time. Organizational culture comes from within the organization—it cannot be imposed from the outside.⁴

And Builder states that “the most powerful institutions in the American national security arena are the military services-the Army, Navy, [Marines], and Air Force-not the Department of Defense or Congress or even their commander in chief, the president.”⁵

If the above assertions by Smith and Builder are correct and the Chairman of the Joint Chiefs of Staff and Secretary of Defense have no leverage to influence service culture in order to align with their strategic objectives, then senior strategic leaders must consider an organizational solution in which all of the services are merged into a unified military. In this type of scenario, all of the branches of the military would report to the Chairman of the Joint Chiefs of Staff and the Secretary of Defense. There would be no more service secretaries or departments. There would be one common rank structure, uniform, doctrine, personnel management system, evaluation and promotion system, acquisition system, etc.

While such a unified system would have its advantages, there are certainly disadvantages and risks to consider. By eliminating the service secretaries, civilian control of the military would be arguably weakened. Innovations that could have been developed as a result of interservice competition would never be realized. And finally, such an endeavor would require monumental legislation on par with the National Defense Act of 1947 and the Goldwater Nichols Act of 1986, both of which encountered stiff

political resistance. Because of the unintended consequences (e.g. weakened civilian control, loss of innovation) and the strong resistance this course of action would face, it is not a feasible or an acceptable solution.

Suitable: Yes	Feasible: No	Acceptable: No
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Course of Action 2—Integrate Cultures through a Joint Venture Approach

Another course of action is to integrate the services through what the corporate world would term a Joint Venture approach—“establishing a complete and separate formal organization with its own structure, governance, workforce, procedures, policies, and culture while the predecessor companies still exist.”⁶ In reality, this approach is already being implemented through Geographic Combatant Commands, Functional Combatant Commands, Joint Task Forces, and the Joint Staff.

The issue then is the amount of control these Joint organizations have in influencing their own culture. An analysis of any Joint organization will reveal that despite its Joint title, the services are very much segregated into their respective stove-pipes/silos based on their domains, e.g. Air Component (Air Force), Land Component (Army), Maritime Component (Navy). While the staff officers working in the Joint headquarters may experience more integration, they are still affiliated with their service through their rank, uniform, evaluation criteria, etc. and are eager to return to their service once their Joint tour is complete.

In order for a Joint Venture approach to be effective in aligning service cultures with strategic direction, a parallel effort is required by all the services. This requires

agreement by the component commanders on what cultural elements should be retained, integrated, or changed based on the needs of the Joint organization. However, even if such an agreement were possible, there would undoubtedly be resistance to change from the membership of each service. Such resistance would need to be overcome with any of the internal change models presented earlier in this thesis, e.g. Kotter.

Another way for the Joint Venture approach to be effective is to empower the Joint Force Commander (Combattant Command, JTF, etc.) with the necessary tools for culture building. In this model, the individual services would still pay the service member but the Joint Force Commander would have the authority and resources to train, clothe, and equip his organization the way he saw fit. There is some resemblance here with what SOCOM has accomplished with their organization in terms of acquiring Title X authorities and resources despite their members being from different services.

While this solution is both suitable and acceptable, due to the inability of a Joint organization to implement necessary cultural planning given the frequent rotation of its membership and the strong cultures of the services, this course of action is not currently feasible unless Title X authorities and resources are granted to the Joint Force Commander.

Suitable: Yes	Feasible: No	Acceptable: Yes
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Course of Action 3—Retain Culture with an Alliance Approach

While the first two courses of action recommend changing or integrating service cultures through a merger or joint venture approach, this approach will recommend the

services retain their culture through an alliance approach—“a cooperative effort by two or more entities in pursuit of their own strategic objectives.”⁷ The reasoning behind this approach is that since 70 percent of change efforts fail (according to Kotter), and 75 percent of mergers fail to produce desired results (according to Marks and Mirvis), the logical course of action would then be to avoid the investment of precious time and resources in culture change altogether and instead focus on supporting each other to achieve mutually desired strategic objectives.

Such an approach has successfully been used with multi-national coalitions, inter-agencies, and international organizations where unity of effort is more effective (and attainable) than unity of command. According to a North Atlantic Treaty Organization (NATO) study, the tenets of Unity of Effort are cooperation and mutual confidence between partners and the force commander; through rapport and patience; through respect for different cultures and values; through an understanding and knowledge of each member’s goals, objectives, capabilities and limitations; through identifying the appropriate mission for participating organizations; and through the assignment of equitable tasks in terms of burden and risk sharing.⁸ It is important to note that in this approach, cultural understanding is still important to mission success.

To facilitate cooperation and prevent conflict, a flatter organizational structure could be utilized. A recent trend in business is to utilize a “Knights of the Round Table” organizational structure to improve communications and productivity.

Legend has it that King Arthur created the Round Table to prevent infighting between his Knights at company meetings. Since the table was round instead of rectangular, everyone at the table held equal status. This allowed King Arthur and the Knights to focus on pressing matters like slaying dragons, drinking mead at Yuletide feasts, and rescuing damsels in distress.⁹

This emphasis on a flatter organizational structure empowers employees to make smart decisions and reduce organizational bottlenecks. “By contrast, [traditional] top-down military-style hierarchies are ineffective because such rigidity makes cross-organization communication difficult, and sometimes impossible.”¹⁰ Figure 21 illustrates a “Knights of the Round Table” approach to Joint Task Force organization. Each of the warfighting functions have equal representation from each of the services. Hierarchies are minimized, and the emphasis is on coordination rather than hierarchical decision making. The JTF Commander plays more of a “director’s role” ensuring good communications flow and unity of effort. Because service cultures are retained and only minimal changes to a JTF’s organizational structure are necessary, this COA meets all three criteria of Suitability, Feasibility, and Acceptability.

Suitable: Yes	Feasible: Yes	Acceptable: Yes
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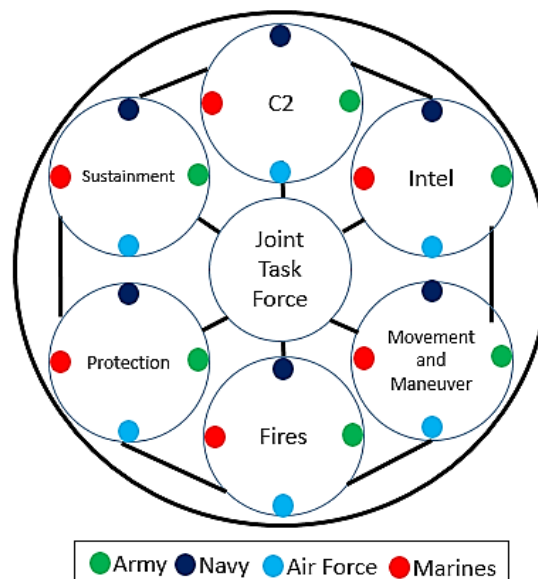


Figure 21. Knights of the Round Table Approach to Joint Organization

Source: Created by author.

Summary and Conclusion

This chapter provided three suitable courses of action for overcoming the primary service barriers to Joint Force 2020. Using the corporate combination forms of merger, joint venture, and alliance, the solutions provided a wide range of strategies for either changing, integrating, or retaining service cultures. Based on an analysis of Feasibility, Suitability, and Acceptability, it was determined that only the Alliance approach met all three criteria. However, additional study and experimentation may be needed to find an optimal solution.

The military is currently undergoing a period of major change with an increased emphasis on Joint integration. How well the services adapt to that change is contingent on acknowledging and understanding the cultural differences between the services and how they may impact Joint operations.

¹Joint Chiefs of Staff, *Capstone Concept for Joint Operations: Joint Force 2020* (Washington, DC: Government Printing Office, September 2012), http://www.dtic.mil/futurejointwarfare/concepts/ccjo_2012.pdf (accessed May 7, 2014), 4.

²Mitchell Lee Marks and Philip H. Mirvis, *Joining Forces Making One Plus One Equal Three in Mergers, Acquisitions, and Alliances* 2nd ed. (San Francisco: Jossey-Bass, 2010), 13.

³H. Richard Yarger, "Towards a Theory of Strategy: Art Lykke and the Army War College Strategy Model," <http://www.au.af.mil/au/awc/awcgate/army-usawc/stratpap.htm> (accessed May 6, 2014).

⁴James M. Smith, "Service Cultures, Joint Cultures, and the US Military," *Airman-Scholar* 4, no. 1 (Winter 1998): 3-17.

⁵Carl H. Builder, *The Masks of War: American Military Styles in Strategy and Analysis: A RAND Corporation Research Study* (Baltimore: The Johns Hopkins University Press, 1989), 3.

⁶Marks and Mirvis, 12.

⁷Ibid.



⁸Angela R. Febbraro, "Leadership and Command," *Multinational Military Operations and Intercultural Factors* (Brussels: NATO Printing Office, 2008), 3-3.

⁹Ninja Post, "How a Forum Can Make your Organization like the Knights of the Round Table," <http://www.ninjablog.com/blog/how-a-forum-can-make-your-organization-more-like-the-knights-of-the-round-table/> (accessed April 26, 2014).

¹⁰Ibid.

APPENDIX A1

ARMY ARTIFACTS

<p style="text-align: center;"><u>Emblems and Logos¹</u></p> <div style="text-align: center;">   </div>
<p style="text-align: center;"><u>Uniform</u></p> <ul style="list-style-type: none"> - Army Combat Uniform (ACU) with backwards American Flag, Unit Patch, Combat Patch - Army Service Uniform (ASU) with blue pants, time spent in combat on the sleeve, Berets - Branch Identification (armor, infantry, artillery, etc.)
<p style="text-align: center;"><u>Organization</u></p> <ul style="list-style-type: none"> - Mission Command - Deep Pyramid structure, i.e. Army, Corps, Division, Brigade, Battalion, Company, Platoon - Matrix Organization—Warfighting functions and Staff functions - Identified by size, type, and by subsets of a higher unit, i.e. 2ID, or 1/2 ABCT - Maneuver units (Armor, Infantry, Field Artillery, Aviation) vs. Support units (the rest)
<p style="text-align: center;"><u>Tools of the trade</u></p> <ul style="list-style-type: none"> - Soldiers - Tanks, armored vehicles - Field artillery - Helicopters - Sustainment/Logistics Assets - Reconnaissance and Surveillance Assets - Command, Control, Communications, Computer, and Intelligence(C4I) Assets
<p style="text-align: center;"><u>Slogans</u></p> <ul style="list-style-type: none"> - Army Strong - “Hooah” - Individual Unit Mottos - Army Song—“The Army Goes Rolling Along”
<p style="text-align: center;"><u>Unique Customs</u></p> <ul style="list-style-type: none"> - Salutes indoors at the end of a meeting and outdoors even in civilian attire if appropriate. - Campaign streamers on flags

¹US Army, www.army.mil (accessed May 16, 2014).

APPENDIX A2

ARMY ESPOUSED BELIEFS AND VALUES

WHO THEY ARE	
The Army Values	Loyalty, Duty, Respect, Selfless Service, Honor, Integrity, Personal Courage
West Point	Duty, Honor, Country ²
The Warrior Ethos	<ul style="list-style-type: none"> - I will always place the mission first - I will never accept defeat - I will never quit - I will never leave a fallen comrade
Soldier's Creed	<ul style="list-style-type: none"> - I am an American Soldier. - I am a warrior and a member of a team. - I serve the people of the United States, and live the Army Values. - I will always place the mission first. - I will never accept defeat. - I will never quit. - I will never leave a fallen comrade. - I am disciplined, physically and mentally tough, trained and proficient in my warrior tasks and drills. - I always maintain my arms, my equipment and myself. - I am an expert and I am a professional. - I stand ready to deploy, engage, and destroy, the enemies of the United States of America in close combat. - I am a guardian of freedom and the American way of life. - I am an American Soldier.³

²West Point Website, <http://www.usma.edu/SitePages/Home.aspx> (accessed February 17, 2014).

³“The Army Values,” <http://www.army.mil/values/index.html> (accessed February 17, 2014).

APPENDIX A3

ARMY CORE COMPETENCIES

WHAT THEY DO
Unified Land Operations-Army units seize, retain, and exploit the initiative to gain and maintain a position of relative advantage in sustained land operations to create conditions for favorable conflict resolution. ⁴
<p>Core Competencies:</p> <ul style="list-style-type: none"> - Combined arms maneuver—Combined arms maneuver encompasses the tactical tasks associated with offensive and defensive operations, security operations such as a screen or guard mission, reconnaissance missions, and special purpose tasks such as river crossings. Nothing the Army does is as challenging as combined arms maneuver - Wide area security—Wide area security is the ability of land-power to secure and control populations, resources, and terrain within a joint operational area. It can be highly cooperative, such as the integration of Army units in a host nation under threat from hostile power. It can be coercive, as when Army forces seize a lodgment and enforce security and control over populated areas within the lodgment. It can be a carefully balanced mix of coercive and cooperative actions, typical in counterinsurgency operations.⁵
<p>Enabling Competencies:</p> <ul style="list-style-type: none"> - Support security cooperation - Tailor forces for the combatant commander - Conduct entry operations - Provide flexible mission command - Support joint and Army Forces - Support domestic civil authorities - Mobilize and integrate the Reserve Components⁶


⁴Headquarters, Department of the Army, Army Doctrine Publication (ADP) 3.0, *Unified Land Operations* (Washington, DC: Government Printing Office, 2012).

⁵Headquarters, Department of the Army. Army Doctrine Publication (ADP) 1, *The Army* (Washington, DC: Government Printing Office, 2012), 3-3.

⁶Headquarters, Department of the Army, ADP 3.0, *Unified Land Operations*.

APPENDIX B1

NAVY ARTIFACTS

<p style="text-align: center;"><u>Emblems and Logos⁷</u></p> <div style="display: flex; justify-content: space-around; align-items: center;">  <div style="text-align: center;"> <p>AMERICA'S</p> <p>NAVY</p> <p>A GLOBAL FORCE FOR GOOD.™</p> </div> </div>	
<p style="text-align: center;"><u>Uniform</u></p> <ul style="list-style-type: none"> - Has the most uniforms of any service (Seasonal variations) - Command ball caps - Flight suits for aviators - Khakis for officers/chiefs - Warfare Pins–Wings, Dolphins, etc. - Command at Sea/Shore Pin - Unique and Distinct Ranks from other services 	
<p style="text-align: center;"><u>Organization</u></p> <ul style="list-style-type: none"> - Independent Command at Sea - Composite Warfare Concept / Centralized Planning, Decentralized Execution - Fleet, Carrier Strike Group, Ship/Squadron - Sea vs. Shore Tours/Units - Identified by name and type of unit and number (no recognizable lineage to higher unit) 	
<p style="text-align: center;"><u>Tools of the trade</u></p> <ul style="list-style-type: none"> - Ships - Submarines - Aircraft - Weapons–Subsurface (torpedoes), Surface (Cruise Missiles), Air (Ballistic Missile Defense) - Other–SEALs, Seabees 	
<p style="text-align: center;"><u>Slogans</u></p> <ul style="list-style-type: none"> - Nautical slang - “A Global Force for Good” - Navy Song - “Anchors Aweigh” 	
<p style="text-align: center;"><u>Unique Customs</u></p> <ul style="list-style-type: none"> - Ship Protocol–bell, flags, quarterdeck procedures, etc. - Separate officer and enlisted berthing and dining - Salutes only when in uniform and covered, almost always outdoors (same as Marines) - Chief Petty Officer Induction - Pollywog and Shellback ceremony for crossing the equator 	

⁷US Navy, www.navy.mil and www.navy.com (accessed May 16, 2014).

APPENDIX B2

NAVY ESPOUSED BELIEFS AND VALUES

Navy Core Values⁸	Honor, Courage, and Commitment (Same as Marine Corps)
Tenets from CNO⁹	Warfighting first, Operate Forward, and Be Ready
Sailor's Creed¹⁰	<p>I am a United States Sailor.</p> <p>I will support and defend the Constitution of the United States of America and I will obey the orders of those appointed over me.</p> <p>I represent the fighting spirit of the Navy and those who have gone before me to defend freedom and democracy around the world.</p> <p>I proudly serve my country's Navy combat team with Honor, Courage and Commitment.</p> <p>I am committed to excellence and the fair treatment of all.</p>

⁸“The Navy Core Values,” http://www.navy.mil/navydata/nav_legacy.asp?id=193 (accessed February 17, 2014).

⁹Jonathan W. Greenert, “Chief of Naval Operations–Sailing Directions,” http://www.navy.mil/cno/cno_sailing_direction_final-lowres.pdf (accessed February 17, 2014).

¹⁰“The Sailor's Creed,” http://www.navy.mil/navydata/nav_legacy.asp?id=257 (accessed March 9, 2014).

APPENDIX B3

NAVY STRATEGY AND MISSIONS




Maritime Strategy¹¹	<ul style="list-style-type: none">- Forward Presence- Deterrence- Sea Control- Power Projection- Maritime Security- Humanitarian Assistance &- Disaster Response (HA/DR)
US Navy Mission Sets¹²	<ul style="list-style-type: none">- Forward Naval Presence- Expeditionary Power Projection- Sea Control- Deterrence- Crisis Response- Maritime Security Operations- Security Cooperation- Civil-Military Operations- Humanitarian Assist / Disaster Response (HA/DR)- Counterterrorism- Counter-Proliferation- Air & Missile Defense- Information Operations

¹¹Headquarters, Department of the Navy, *A Cooperative Strategy for the 21st Century Seapower*, <http://www.navy.mil/maritime/maritimestrategy.pdf> (accessed February 17, 2014).

¹²Headquarters, Department of the Navy, *Naval Operations Concept 2010: Implementing the Maritime Strategy*, <http://www.navy.mil/maritime/noc/NOC2010.pdf> (accessed February 17, 2014).

APPENDIX C1

MARINE CORPS ARTIFACTS

<u>Emblems and Logos</u> ¹³		
		
<u>Uniform</u> <ul style="list-style-type: none"> - “MARPAT” Camouflage - Eagle-Globe-Anchor pin - “Blood stripe” on pants - No branch identification and same uniforms for officers and enlisted 		
<u>Organization</u> <ul style="list-style-type: none"> - Scalable Marine Air Ground Task-Force (MAGTF) - Lower proportion of officers, younger and fitter troops, and fewer women than any other service¹⁴ - Dependent on the Navy for operational support, budget, and equipment 		
<u>Tools of the trade</u> <ul style="list-style-type: none"> - Weapons—machine guns, mortars, artillery, tanks, tactical vehicles - Aircraft—Troop Transport, Close Air Support, Air Interdiction - Amphibious ships 		
<u>Slogans</u> <ul style="list-style-type: none"> - “The Few, the Proud, the Marines” - The Nation’s Expeditionary 9-1-1 Force - “Hoorah,” “Semper Fi,” “Every Marine a Rifleman” - Leathernecks, Devil Dogs, Jar Heads - Nautical Slang - Marine Corps Hymn—“From the Halls of Montezuma...” - “Once a Marine, Always a Marine.” 		
<u>Unique Customs</u>		

¹³“Eagle, Globe, Anchor,” http://en.wikipedia.org/wiki/Eagle,_Globe,_and_Anchor; “Iwo Jima Memorial,” http://en.wikipedia.org/wiki/Marine_Corps_War_Memorial; “Marine with Sword,” <http://www.usmc-mccs.org/careers/> (accessed May 16, 2014).

¹⁴James M. Smith, “Service Cultures, Joint Cultures, and the US Military,” *Airman-Scholar* 4, no. 1 (Winter 1998): 3-17.

- Salutes only when in uniform and covered, usually outdoors (same as Navy)
- Officers eat last
- Culture of fitness

APPENDIX C2

MARINE CORPS ESPOUSED BELIEFS AND VALUES

Core Values	Honor, Courage, and Commitment (Same as the Navy)
Motto	Semper Fidelis
Enduring Principles	<ul style="list-style-type: none">- Every Marine a Rifleman- Expeditionary Naval Force- Combined Arms Organization- Ready and Forward Deployed- Agile and Adaptable- Marines Take Care of Their Own¹⁵

¹⁵Headquarters, US Marine Corps, “Marine Corps Vision and Strategy,” http://www.onr.navy.mil/~media/Files/About-ONR/usmc_vision_strategy_2025_0809.ashx (accessed May 16, 2014).

APPENDIX C3

MARINE CORPS MISSION, APPROACH, AND VISION

Mission	The Marine Corps has been America's expeditionary force in readiness since 1775. We are forward deployed to respond swiftly and aggressively in times of crisis. We are soldiers of the sea, providing forces and detachments to naval ships and shore operations. We are global leaders, developing expeditionary doctrine and innovations that set the example, and leading other countries' forces and agencies in multinational military operations. These unique capabilities make us "First to Fight," and our nation's first line of defense ¹⁶ .
Approach	Every Marine is a rifleman, trained first as a disciplined warrior regardless of military occupational specialty. This training is key to [their] philosophy of maneuver warfare. Maneuver warfare combines operational positioning with firepower, demands agile forces capable of quick decision making, and employs the human elements of war—boldness, creativity, intelligence and the warrior spirit. [Their] combined arms approach multiplies the Marine Corps' strengths by bringing [their] land, air and sea forces together to achieve every mission. This organization creates a scalable force with incomparable warfighting capabilities. It is the key to winning battles. ¹⁷
Vision	The Marine Corps of 2025 will fight and win our Nation's battles with multi-capable MAGTFs, either from the sea or in sustained operations ashore. Our unique role as the Nation's force in readiness, along with our values, enduring ethos, and core competencies, will ensure we remain highly responsive to the needs of combatant commanders in an uncertain environment and against irregular threats. Our future Corps will be increasingly reliant on naval deployment, preventative in approach, leaner in equipment, versatile in capabilities, and innovative in mindset. In an evolving and complex world, we will excel as the Nation's expeditionary "force of choice." ¹⁸



¹⁶“Our Purpose.” <http://www.marines.com/history-heritage/our-purpose> (accessed March 10, 2014).

¹⁷“Marine Corps Principles and Values,” <http://www.marines.com/history-heritage/principles-values> (accessed May 16, 2014)

¹⁸“Marine Corps Vision and Strategy 2025,” http://www.onr.navy.mil/~media/Files/About-ONR/usmc_vision_strategy_2025_0809.ashx (accessed February 17, 2014), 6.

APPENDIX D1

AIR FORCE ARTIFACTS

Emblems and Logos ¹⁹	
  <p>U.S. AIR FORCE</p>	
<p><u>Uniform</u></p> <ul style="list-style-type: none"> - Least amount of uniforms of any service - Tiger Stripe Camouflage - Flight Suit, leather jackets, scarves for pilots 	
<p><u>Organization</u></p> <ul style="list-style-type: none"> - Hierarchical: Numbered Air Force, Wing, Group, Squadron, Flight - Expeditionary Concept–Air Expeditionary Wing / Air Expeditionary Group - Operations Groups supported by separate Logistics and Support Groups - Centralized Control, Decentralized Execution 	
<p><u>Tools of the trade</u></p> <ul style="list-style-type: none"> - Aircraft - ICBMs - Cyber Assets - Space Assets - Air Operations Centers 	
<p><u>Slogans</u></p> <ul style="list-style-type: none"> - Aim High - Fly Fight and Win - We do the Impossible Every Day - Air Power - Air Force Song–“OFF we go into the wild blue yonder...” 	
<p><u>Unique Customs</u></p> <ul style="list-style-type: none"> - Salutes uncovered during indoor ceremonies / salutes outdoors in PT gear. - Mustache March 	

¹⁹“Air Force Emblem,” http://en.wikipedia.org/wiki/United_States_Air_Force; “Air Force Symbol,” http://en.wikipedia.org/wiki/United_States_Air_Force_Symbol (accessed May 16, 2014).

APPENDIX D2

AIR FORCE ESPOUSED BELIEFS AND VALUES

Core Values	Integrity First, Service Before Self, Excellence in All We Do ²⁰
Airman's Creed	<p>I AM AN AMERICAN AIRMAN. I AM A WARRIOR. I HAVE ANSWERED MY NATION'S CALL.</p> <p>I AM AN AMERICAN AIRMAN. MY MISSION IS TO FLY, FIGHT, AND WIN. I AM FAITHFUL TO A PROUD HERITAGE, A TRADITION OF HONOR, AND A LEGACY OF VALOR.</p> <p>I AM AN AMERICAN AIRMAN, GUARDIAN OF FREEDOM AND JUSTICE, MY NATION'S SWORD AND SHIELD, ITS SENTRY AND AVENGER. I DEFEND MY COUNTRY WITH MY LIFE.</p> <p>I AM AN AMERICAN AIRMAN: WINGMAN, LEADER, WARRIOR. I WILL NEVER LEAVE AN AIRMAN BEHIND, I WILL NEVER FALTER, AND I WILL NOT FAIL.²¹</p>

²⁰“Air Force Core Values,” <http://www.airforce.com/learn-about/our-values/> (accessed February 19, 2014).

²¹Ibid.

APPENDIX D3

AIR FORCE MISSION, ENDURING CONTRIBUTIONS, AND OPERATIONS

Mission	<ul style="list-style-type: none"> - The mission of the United States Air Force is to fly, fight and win ... in air, space and cyberspace. To achieve that mission, the Air Force has a vision of <i>Global Vigilance, Reach and Power</i>. That vision orbits around three core competencies: developing Airmen, technology to war fighting and integrating operations²²
Enduring Contributions	<ul style="list-style-type: none"> - Air and Space Superiority - Intelligence, Surveillance, and Reconnaissance - Rapid global mobility - Global strike - Command and Control²³
Air Force Operations	<ul style="list-style-type: none"> - Strategic Attack - Counterair Operations - Counterland Operations - Countersea Operations - Airspace Control - Space Operations - Cyberspace Operations - Air Mobility Operations - Special Operations - Homeland Operations - Nuclear Operations - Irregular Warfare - Foreign Internal Defense - Global Integrated Intelligence, Surveillance, and Reconnaissance Operations - Targeting - Information Operations - Electronic Warfare - Personnel Recovery Operations²⁴

²²“Our Mission,” <http://www.airforce.com/learn-about/our-mission/> (accessed March 11, 2014).

²³*Ibid.*

²⁴LeMay Center for Air Force Doctrine, Volume 4, *Operations*, <https://doctrine.af.mil/download.jsp?filename=Volume-4-Operations.pdf> (accessed May 13, 2014).

APPENDIX E

NAVAL AVIATOR VS. AIR FORCE PILOT ANECDOTE

Bob Norris is a former Naval aviator who also did a 3 year exchange tour flying the F-15 Eagle. He is now an accomplished author of entertaining books about US Naval Aviation including "Check Six" and "Fly-Off." In response to a letter from an aspiring fighter pilot on which military academy to attend, Bob replied with the following.

12 Feb 04

Young Man,

Congratulations on your selection to both the Naval and Air Force Academies. Your goal of becoming a fighter pilot is impressive and a fine way to serve your country. As you requested, I'd be happy to share some insight into which service would be the best choice. Each service has a distinctly different culture. You need to ask yourself "Which one am I more likely to thrive in?"

USAF Snapshot: The USAF is exceptionally well organized and well run. Their training programs are terrific. All pilots are groomed to meet high standards for knowledge and professionalism. Their aircraft are top-notch and extremely well maintained. Their facilities are excellent. Their enlisted personnel are the brightest and the best trained. The USAF is homogenous and macro. No matter where you go, you'll know what to expect, what is expected of you, and you'll be given the training & tools you need to meet those expectations. You will never be put in a situation over your head. Over a 20-year career, you will be home for most important family events. Your Mom would want you to be an Air Force pilot...so would your wife. Your Dad would want your sister to marry one.

Navy Snapshot: Aviators are part of the Navy, but so are Black shoes (surface warfare) and bubble heads (submariners). Furthermore, the Navy is split into two distinctly different Fleets (West and East Coast). The Navy is heterogeneous and micro. Your squadron is your home; it may be great, average, or awful. A squadron can go from one extreme to the other before you know it. You will spend months preparing for cruise and months on cruise. The quality of the aircraft varies directly with the availability of parts. Senior Navy enlisted are salt of the earth; you'll be proud if you earn their respect. Junior enlisted vary from terrific to the troubled kid the judge made join the service. You will be given the opportunity to lead these people during your career; you will be humbled and get your hands dirty. The quality of your training will vary and sometimes you will be over your head. You will miss many important family events. There will be long stretches of tedious duty aboard ship. You will fly in very bad weather and/or at night and you will be scared many times. You will fly with legends in the Navy and they will kick your ass until you become a lethal force. And some days - when the scheduling Gods have smiled upon you - your jet will catapult into a glorious morning over a far-away sea and you will be drop-jawed that someone would pay you to do it. The hottest girl in the bar wants to meet the Naval Aviator. That bar is in Singapore.

Bottom line, son, if you gotta ask...pack warm & good luck in Colorado. -Banzai

P.S Air Force pilots wear scarves and iron their flight suits.²⁵

²⁵“Tomcat Tales,” <http://www.f-14association.com/stories-12.htm> (accessed April 4, 2014).

APPENDIX F

CORPORATE CULTURE PLANNING CHECKLIST

Pre-Combination Checklist

Conduct cultural audit

- ☐ Understand similarities and differences
- ☐ Respect precombination cultures

Articulate desired cultural end state

- ☐ Establish values and norms for the combined organization
- ☐ Clarify parameters between partners

Combination Checklist

Continue to clarify desired culture

- ☐ Uphold the desired cultural end state
- ☐ Identify desired cultural characteristics not present in either partner

Be proactive in culture building

- ☐ Establish and abide by principles and rules of engagement for the transition
- ☐ Recognize how early leadership behavior affects eventual cultural norms

Minimize culture clash

- ☐ Respect combining cultures
- ☐ Conduct deep cultural learning interventions

Post-Combination Checklist

Build the desired culture through leadership actions

- ☐ Monitor the intended and unintended cultural messages being sent
- ☐ Walk the talk

Reinforce desired culture through the ranks

- ☐ Engage employees in “ translating “ vision, critical success factors, and operating principles into on-the-job actions
- ☐ Provide short-term bonus opportunities to reinforce desired behaviors and align long-term reward programs with desired culture²⁶

²⁶Mitchell Lee Marks and Philip H. Mirvis, *Joining Forces Making One Plus One Equal Three in Mergers, Acquisitions, and Alliances*, 2nd ed. (San Francisco: Jossey-Bass, 2010).

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