COMMANDING THE GLOBAL FLEET STATION AND THE JOINT SEA BASE

by

Peihua Ku

December 2007

Thesis Co-Advisors:

Gary Langford
Cary Simon

Approved for public release; distribution is unlimited
By carefully considering the various command structural options available in expeditionary warfare personnel, platforms and capabilities, the U.S. military can leverage these options and other components into an interrelated and more powerful operations program. Particular structural variations are more conducive for supporting and expanding operational maneuver options, including facilitating assured access and entry from the sea. This thesis analyzes complex organizational structures in an effort to maximize the Sea Basing and the Global Fleet Station (GFS) strategies for the U.S. military. Systems engineering analyses were conducted for the GFS and the Joint Sea Base (JSB) based on needs, stakeholders and functions. Qualitative evaluations based on these inputs led to extensive descriptions of organizational characteristics, design parameters and contingency factors for the GFS/JSB.

A GFS is a self-sustaining sea base conducting regional operations through tailored and adaptive packages, including launching engagements with partner nations within areas of interest. Based on these analyses, GFS Commanders would perform primarily as crisis managers, overseeing the GFS organization through partisan mutual adjustments made in response to competing demands in the political environment. Configured as a responsive professional bureaucracy, the GFS would be intended to incorporate the standardization of specialized skills it collects, maintains and manages, typically learned elsewhere, i.e., similar to hospitals and universities whose doctors and professors respectively comprise the operating cores.

Sea Basing is the culmination of joint combat power from the sea, encompassing select expeditionary joint forces with minimal if any reliance on land bases within the Joint Operations Area. Based on these analyses, uncertainty and unpredictability of circumstances abound in the JSB adaptive administrative adhocracy where power shifts as teams of experts mutually adjust to a complex and dynamic environment.

Organizational Structure, Global Fleet Station, Joint Sea Base, Sea Basing

Unclassified

Unclassified

Unclassified

UU
COMMANDING THE GLOBAL FLEET STATION AND THE JOINT SEA BASE

Peihua Ku
Lieutenant, United States Navy
B.A., Cornell University, 1994
M.S., University of California, Los Angeles, 1997

Submitted in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE IN SYSTEMS ENGINEERING ANALYSIS

from the

NAVAL POSTGRADUATE SCHOOL
December 2007

Author: Peihua Ku

Approved by: Mr. Gary Langford
Thesis Advisor

Dr. Cary Simon
Co-Advisor

Wayne P. Hughes, Jr. CAPT, USN (RET)
Chairman, Systems Engineering and Analysis Curriculum Committee
ABSTRACT

By carefully considering the various command structural options available in expeditionary warfare personnel, platforms and capabilities, the U.S. military can leverage these options and other components into an interrelated and more powerful operations program. Particular structural variations are more conducive for supporting and expanding operational maneuver options, including facilitating assured access and entry from the sea. This thesis analyzes complex organizational structures in an effort to maximize the Sea Basing and the Global Fleet Station (GFS) strategies for the U.S. military. Systems engineering analyses were conducted for the GFS and the Joint Sea Base (JSB) based on needs, stakeholders and functions. Qualitative evaluations based on these inputs led to extensive descriptions of organizational characteristics, design parameters and contingency factors for the GFS/JSB.

A GFS is a self-sustaining sea base conducting regional operations through tailored and adaptive packages, including launching engagements with partner nations within areas of interest. Based on these analyses, GFS Commanders would perform primarily as crisis managers, overseeing the GFS organization through partisan mutual adjustments made in response to competing demands in the political environment. Configured as a responsive professional bureaucracy, the GFS would be intended to incorporate the standardization of specialized skills it collects, maintains and manages, typically learned elsewhere, i.e., similar to hospitals and universities whose doctors and professors respectively comprise the operating cores.

Sea Basing is the culmination of joint combat power from the sea, encompassing select expeditionary joint forces with minimal if any reliance on land bases within the Joint Operations Area. Based on these analyses, uncertainty and unpredictability of circumstances abound in the JSB adaptive administrative adhocracy where power shifts as teams of experts mutually adjust to a complex and dynamic environment.
THIS PAGE INTENTIONALLY LEFT BLANK
# TABLE OF CONTENTS

I. BACKGROUND ........................................................................................................................................... 1  
   A. SEA BASING ................................................................................................................................. 3  
   B. GLOBAL FLEET STATION ........................................................................................................... 5  
   C. PURPOSE ......................................................................................................................................... 8  

II. METHODOLOGY ....................................................................................................................................... 11  
   A. SYSTEMS ENGINEERING ANALYSIS ......................................................................................... 11  
   B. QUALITATIVE EVALUATION ......................................................................................................... 13  

III. RESULTS .................................................................................................................................................. 15  
   A. SYSTEMS ENGINEERING ANALYSIS ......................................................................................... 15  
      1. Needs Analysis .......................................................................................................................... 15  
      2. Stakeholders Analysis ............................................................................................................. 17  
      3. Functional Architecture ......................................................................................................... 30  
   B. QUALITATIVE EVALUATION ......................................................................................................... 39  
   C. ORGANIZATIONAL TEST ............................................................................................................. 49  

IV. DISCUSSION ............................................................................................................................................ 53  
   A. THE GLOBAL FLEET STATION .................................................................................................... 53  
   B. THE JOINT SEA BASE .................................................................................................................. 57  

V. CONCLUSIONS ........................................................................................................................................ 63  
   A. INTERPRETATION OF RESULTS ................................................................................................. 63  
   B. BENEFITS OF STUDY .................................................................................................................... 65  
   C. AREAS FOR FURTHER STUDY .................................................................................................... 68  

LIST OF REFERENCES .................................................................................................................................... 71  
INITIAL DISTRIBUTION LIST ...................................................................................................................... 75
LIST OF FIGURES

Figure 1. Pictorial Overview of Methodology ................................................................. 11
Figure 2. Summary of Problems, Needs and Relevancy of GFS and JSB Leading to Systems' Functional Decompositions. ........................................... 15
Figure 3. Depiction of Stakeholder Types During the Operational and Support Phase of Life Cycle as Elements in Relation to the JSB and GFS Domain ..................................................................................................... 17
Figure 4. Primary Stakeholder Types Listed over the Life Cycle Phases of the Project and Graphed According to Their Potential Effect on Project Over Time ........................................................................................................... 19
Figure 5. JSB, GFS Domain Showing the Multiple Interactions Between Stakeholder Types ........................................................................................................... 23
Figure 6. Stakeholders Types with Respect to the Potential as a Threat or for Cooperation ........................................................................................................... 28
Figure 7. Functional Decomposition of the U.S. Military Leading to the Purposes of the GFS and JSB and Their Mutual Transfer Functions ......................................................................................................................... 31
Figure 8. Depiction of Joint Campaign Phases Juxtaposed Against the Roles of the GFS and JSB .......................................................................................................................... 32
Figure 9. Architecture of Transfer Functions. Five Transfer Functions are Listed at the Bottom ............................................................................................................................. 34
Figure 10. Elaboration of Global Fleet Station Functions, Based on the Primary Function of Showing an Image and the Secondary Function of Phases 0 and V of a Joint Campaign .......................................... 36
Figure 11. Elaboration of Joint Sea Basing Functions, Based on the Primary Function of Projecting Power and the Secondary Functions of Phases I to IV of a Joint Campaign ................................................. 38
Figure 12. Reclassification of Internal and Boundary Stakeholders according to Mintzberg’s Basic Parts of an Organization ................................................................. 39
Figure 13. GFS and JSB Efficiency and Effectiveness Dimensions Highlighted Showing a Match for GFS with Responsive and JSB with Adaptive Configurations ........................................................................................................... 48
Figure 14. Depiction of GFS Command Structure as a Professional Bureaucracy ................................................................................................................................. 53
Figure 15. Depiction of a JSB Command Structure as an Adhocracy ....................... 58
# LIST OF TABLES

Table 1. Stakeholders Listed According to Their Relationship Type to a GFS and a JSB ................................................................. 20
Table 2. Impact of Stakeholder Types on the GFS/JSB System .................. 24
Table 3. Stakeholder Type Described Using Four Factors for Threat or Cooperation Potential for the GFS .................................................... 26
Table 4. Stakeholder Type Described Using Four Factors for Threat or Cooperation Potential for the JSB .................................................. 27
Table 5. Design Parameters for GFS and JSB ........................................... 40
Table 6. Contingency Factors for GFS and JSB ......................................... 42
Table 7. GFS Associated Elements Highlighted Showing the Match to a Professional Bureaucracy .............................................................. 43
Table 8. JSB Associated Elements Highlighted Showing the Match to an Adhocracy .................................................................................. 45
Table 9. Organizational Characteristics for GFS and JSB ............................ 46
Table 10. Organizational Framework for GFS and JSB ............................... 49
Table 11. A Summary of the Results .......................................................... 63
LIST OF SYMBOLS, ACRONYMS, AND ABBREVIATIONS

A2AD: Anti-Access, Area Denial
AADC: Area Air Defense Commander
ACA: Airspace Control Authority
AMC: Air Mobility Command
AMWC: Amphibious Warfare Commander
APS: African Partnership Station
BUPERS: Bureau of Naval Personnel
C2WC: Command and Control Warfare Commander
CATF: Commander, Amphibious Task Force
CIA: Central Intelligence Agency
CINC: Combatant Commander, Commanders of Unified Command
CJSB: Commander, Joint Sea Base
CJTF: Commander, Joint Task Force
CLF: Commander, Landing Forces
CNO: Chief of Naval Operations
COCOM: Combatant Commander
DCMA: Defense Contract Management Agency
DECAS: Defense Contract Administration Services
DFAS: Defense Finance and Accounting Service
DHS: Department of Homeland Security
DoD: Department of Defense
DOS: Department of State
GAO: Government Accounting Office
GFS: Global Fleet Station
IDP: Internally Displaced Persons
IRS: Internal Revenue Service
JCIDS: Joint Capabilities Integration and Development System
JCSC: Joint Chiefs of Staff
JFC: Joint Forces Commander
JOA: Joint Operating Area
JSB: Joint Sea Base
JTF: Joint Task Force
JTF HQ: Joint Task Force Headquarters
MSC: Military Sealift Command
**NATO**: North Atlantic Treaty Organization
**NAVWARDEVCOM**: Navy Warfare Development Command
**NECC**: Naval Expeditionary Combat Command
**NGO**: Non-Government Organization
**NPS**: Naval Postgraduate School
**NWDC**: Navigation Weapons Delivery System
**ONR**: Office of Naval Research
**POTUS**: President of the United States
**SCC**: Sea Combatant Commander
**SEALs**: Sea, Air and Land Special Operations Forces
**SECDEF**: Secretary of Defense
**SDDC**: Military Surface Deployment and Distribution Command
**SPAWAR**: Space and Naval Warfare Systems Command
**STWC**: Strike Warfare Commander
**SYSCOM**: Naval Systems Command
**TRANSCOM**: United States Transportation Command
**UN**: United Nations
**U.S.**: United States
**USAID**: United States Agency for International Development
**WMD**: Weapons of Mass Destruction
GLOSSARY

**Assembling**: integrating scalable joint capabilities.¹

**Closing**: the rapid closure of joint force capability to an area of crisis.²

**Coordinating**: integrating inter-agency, joint, allied and coalition forces through information sharing, battle-space awareness within a net-centric environment.

**Customer**: one who buys something in return for goods and services from the system. Representative of the users of the system.

**Global Fleet Station**: a self-sustaining sea base from which to conduct regional Phase 0 operations, through tailored and adaptive packages, and to launch a variety of engagements with partner nations within a regional area of interest.³

**Internal Personnel**: one who takes guidance within the system to produce the output of the system. Equivalent to Mintzberg’s operating core.

**Impact**: a combination of a stakeholder’s influence on the system and of the importance of his/her actions on the system.

**Importance**: the significance a stakeholder’s actions have on the system.

**Influence**: the capacity a stakeholder has to cause an effect on the system.

**Investor**: one who transfers resources to empower another to perform in exchange for an expectation of a return (usually financial) on one’s investment.

**Market Segment**: a subgroup of people or organizations sharing one or more characteristics that cause them to have similar product needs.

**Need**: the end goal or solution to fix a problem.

**Operator**: one who acts as an agent or acts in a direct manner performs an action as part of, in place of, or in concert with the system’s actions. Equivalent to Mintzberg’s strategic apex and middle line managers.

---

¹ Department of Defense, 10-12.
² Department of Defense, 10-12.
³ Erin Mcavoy.
**Participant**: one who takes part in the system’s activities, but operates independently from the system’s internal hierarchy.

**Partner**: equivalent and independent service provider who takes part in a mutual undertaking.

**Problem**: an unwelcome or harmful matter or situation needing to be dealt or overcome. What is at issue? What needs to be fixed?

**Reconstituting**: the rapidly recovering, reconstituting and redeploying joint combat capabilities within and around the maneuverable sea base for subsequent operations.\(^4\)

**Relevancy**: the mechanism by which a need is satisfied and a problem fixed.

**Sea basing**: the rapid deployment, assembly, command, projection, reconstitution, and re-employment of joint combat power from the sea, while providing continuous support, sustainment, and force protection to select expeditionary joint forces without reliance on land bases within the Joint Operations Area (JOA). These capabilities expand operational maneuver options, and facilitate assured access and entry from the sea.\(^5\)

**Stakeholder**: any individual or group who has a stake in what the system or project is trying to accomplish

**Sustaining**: the persistence of joint forces afloat and ashore, through transition to decisive combat operations ashore. Includes protecting force operations, specifically utilizing sea based strike assets.\(^6\)

**System**: a set of elements (e.g., stakeholders) that are either dependent or independent, but interacting pair-wise - temporarily or physically - to achieve a common purpose.

**User**: individual who uses or operates the system.

---

\(^4\) Department of Defense, 10-12.

\(^5\) Department of Defense, 7.

\(^6\) Department of Defense, 10-12.
ACKNOWLEDGMENTS

First and foremost, to my family... for always being somewhere I could call home.

To Professor Cary Simon... for helping put my ideas into words.

To Lecturer Gary Langford... for those fascinating journeys across space, but not time.

To Tyler... just because.
I. BACKGROUND

Sea basing is a critical future national military capability that can legitimize the Navy’s role in today’s violent era of asymmetric challenges.\(^7\) The Global Fleet Station (GFS) was developed from sea basing, a fundamental concept of Sea Power 21. Current pilot programs are underway by Task Groups 40.9 and 60.4 to develop the GFS into a reliable option for Combatant Commanders. However, the concepts of sea basing and of a GFS serve different purposes in different contexts. The GFS focuses on maritime biased Phase 0 operations, while a Joint Sea Base (JSB) would focus on forcible entry campaigns.

After the Cold War, international politics began encompassing broader interactions among multiple state actors. One underlying component was an apparent United States (U.S.) operational expansion beyond Europe toward emerging conflict areas, e.g., the Balkans and the Middle East. Some areas sat astride national and socio-economic fault lines where societies struggled over territory and resources and where there was competition for military, economic, political and religious power.\(^8\) These potential and active trouble zones included contested, unstable areas where conflicts were likely to erupt over access to or the possession of vital materials. Some of the most promising sources of oil and natural gas lie in offshore areas where ownership can be a matter of fierce dispute, leading to other problems such as environmental degradation, economic disorder, population growth, and transnational crime, possibly leading to ethnic wars and political rivalries.\(^9\)

A growing challenge in the military dimension of U.S. power-projection continues to revolve around increasingly complex operations owing to political,

---

\(^7\) Vern Clark, 1-2.

\(^8\) Samuel Huntington, 361-5.

\(^9\) Michael T. Klare, 53, 60-1.
geographic and resource constraints. The reduction of forward deployed bases in Europe and the Western Pacific coincides with the trend of U.S. defense forces engaging in different areas of the world, e.g., Central Asia, Africa and Latin America. Based on Gulf War II experiences, some allies simply cannot be relied upon to provide base access when and where needed by U.S. forces. Increased access to satellite services unfortunately allows regional rogue states both to pre-target key fixed facilities and to monitor U.S. deployments into forward bases. Inadequate basing facilities appears the likely overall outcome.

Recent terrorist attacks on American assets overseas highlight the vulnerability of a stationary land based target. Examples include the 1996 bomb attack on the U.S. military’s Khobar Towers barracks, U.S. embassy attacks in Kenya and Tanzania in 1998, and the 2000 attack on the USS Cole in the Yemeni port of Aden. In addition to the political and financial costs, overseas land bases are vulnerable to attacks from local and third-party special forces, commandoes and terrorists. As U.S. opponents obtain modern weaponry — such as stealth, cruise and ballistic missiles — the technological advancement of their armament will threaten to make fixed bases more vulnerable to attack.

U.S. military forces may continue to encounter access problems in operations around the world. Recent events in Kosovo, Afghanistan and Iraq underline the uncertainty of available land bases due to geographical or political factors that delay, limit or prevent their use. In the buildup for Operation Iraqi Freedom, the Army’s 4th Infantry Division was denied entry into Iraq through Turkey. The Air Force had to relocate command operations to Qatar and other locations, after Saudi Arabia restricted the use of its airspace by U.S. warplanes. Presently, the bill through the House of Representatives declaring

---

10 Andrew Krepinevich, et al., 1-2.
11 Andrew Krepinevich, 2-3
12 Michael Satchell.
13 Lawrence P. Farrell Jr., 1-2.
the Armenian genocide by the Ottoman Empire jeopardizes the flow of air cargo into Iraq through the Turkish Incirlik air base and the use of Turkish air space and sea ports.14

U.S. forces are predicted to encounter anti-access (A2) strategies and area-denial (AD) operations from adversaries.15 Part of the high-tech revolution in military capabilities is intended to facilitate U.S. power projection from the homeland rather than from platforms in Europe, Asia and the Middle East. Joint operations must dominate future military campaigns by meeting the A2AD challenge as a more capable and focused military. Until the U.S. military devises more plausible joint operational concepts, it is likely transformation will be retarded.16 The logic underlying this paper is that the more the military focuses on a joint path solution, the more it will be able to concentrate its resources into successfully executing the emerging war-fighting concept of sea basing. Coordinated forces, doctrines and operational concepts could encourage the military to better address issues of force planning without inter-service feuds over limited resources and personnel.17

A. SEA BASING

In October 2002, the Chief of Naval Operations, Admiral Vern Clark, projected a vision called “Sea Power 21” to align the Navy’s efforts with national defense, accelerate its progress and activate the potential of Naval personnel. Sea basing was a fundamental concept within Sea Power 21, lying at the heart of the Navy’s continued operational effectiveness. Sea basing would enhance operational independence and would support joint forces, through networked, mobile, and secure sovereign platforms operating in the maritime domain.18 Sea

14 “Unearthing the past, endangering the future.”
15 G. John Ikenberry, 27.
16 Krepinevich, 6.
17 Krepinevich, et al., 2-3.
18 Vern Clark, 1-2.
basing envisions the oceans as the world’s greatest maneuvering space and its biggest parking lot. The aim is to master afloat logistics in terms of having access to and providing direct resources to ashore forces.19

There is a need for a maneuverable facility to serve as a base of operations, a command center, a logistics node and a transportation hub whereby a commander can choose to exploit enemy weaknesses, employ the element of surprise, and circumvent enemy defensive preparations. It would minimize the need for host nation support by providing a sustainable, sovereign platform that is relatively free from diplomatic, regulatory, and political constraints, thus limiting the impact of A2AD challenges. These forward operating sea based forces would possess inherent force protection while providing connectivity to leverage national assets through a reach-back capability.20 Within a joint warfare concept, sea basing would function in conjunction with land bases and global air strike and transport capabilities. Sea basing is therefore a future expeditionary concept of a base at sea with the ability to enable and sustain operations up to a Marine Expeditionary Brigade or an equivalent sized Army unit up to 2,000 miles from shore.

Since the collapse of the Soviet Union, a redefinition of the U.S. Navy is emerging, designed to better align naval forces with national security threats. Although the U.S. Navy is the preeminent oceanic force, the current war hinges primarily on successful ground forces. Sea basing, the promising idea introduced by Sea Power 21,21 is intended to play a crucial role in that redefinition. As a future national military capability and an evolving Joint Integrating Concept (JIC), sea basing is designed to fulfill the shift in U.S. global basing policy of placing more emphasis on the ability to surge quickly to trouble spots across the globe and making U.S. forces more agile and expeditionary.22

---

19 Geoffrey Till, 16.
20 Vern Clark and Michael W. Hagee, 6.
21 Stephen Saunders, 2.
22 Donald H. Rumsfeld, quoted by Department of Defense, 6.
B. GLOBAL FLEET STATION

The physical manifestation of the sea basing concept is the GFS, defined as a sustained sea base from which to conduct primarily regional operations through tailored and adaptive packages, and to launch a variety of engagements with partner nations within a regional area of interest. A GFS would incorporate the long term vision of a 1,000 ship Navy or the Global Maritime Partnership. This future package shifts the sea basing concept in major ways.

First, access by definition is a joint problem requiring joint participation. Jointness in sea basing terms means the ability of the system to serve as a Joint Task Force Commander's (CJTF) location, to serve as a dynamic base of operations, to handle logistics and to support and sustain operations from the sea for all four services plus special operations forces. The scenario of an increasing lack of access highlights a significant weakness of which sea basing was designed to address, i.e., substantial forces and services delivered directly from sea platforms, mitigating a lack of land bases. Sea basing could become increasingly central to most joint military planning. Independence to act, forward-based mobility, and the added security of a moving platform are reasonable outcomes for the U.S. military, as operational reach and connectivity become more advanced and capable. Resolving or aligning these interacting components will require deep Army and Air Force participation.

As defined by Admiral Mullen, a GFS would serve as a “hub where all manner of Joint, inter-agency, international organizations, navies, coast guards and non-governmental organizations could partner together as a force for good.” The GFS directly supports the growing international interest in global maritime partnerships, a foundation and enabler for the 1,000-ship Navy concept. The

---

23 Mcavoy.
24 Geoff Fein.
26 Charles W. Moore and Edward Hanlon Jr.
1,000-ship Navy is to be a loose coalition of like-minded navies operating together for a common aim.\textsuperscript{27} A GFS providing primarily benign, regional presence would be intended to build regional support through inter-service training with local forces.

During this spring and summer, the pilot GFS led by Task Group 40.9 on the Swift (HSV 2) attempted to validate the GFS concept by enhancing cooperative partnerships with regional maritime services. The U.S. Navy and Coast Guard training teams and U.S. State Department representatives facilitated training sessions with their Central American counterparts. Training covered techniques for assessing internal security, assessing vulnerabilities and how to put plans in place to mitigate them, navigation and small-boat handling and sharing ideas on effective leadership. In addition, the Task Group hosted the U.S. Ambassador to Honduras, built a latrine for a local indigenous village, visited local schools, hosted several tours, participated in sporting events, hosted a barbeque and held a ground-breaking promotion ceremony.

Continuing on the concept of a GFS as an enabler of the 1,000 Ship Navy, current maritime-oriented exercises are arguably shallow in the primary sea basing attribute of jointness. Notably absent from Task Group 40.9 was any Army and Air Force involvement. This is also the case with the upcoming Africa Partnership Station (APS) \textsuperscript{28} conducted by Task Group 60.4 in Africa. While inter-service rivalries make a JSB traditionally challenging, increasing joint capabilities should be paramount for implementing the sea basing concept as a critical future national military capability for the U.S.\textsuperscript{29} Progress towards a truly joint approach for sea basing construction and operation is impeded by a lack of a unified vision and sufficient coordination among the services.\textsuperscript{30}

\textsuperscript{27} Mike Mullen, Remarks at NWC Current Strategy Forum, 8.
\textsuperscript{28} “Africa Partnership Station (APS)... Promoting Maritime Safety and Security.”
\textsuperscript{29} Defense Science Board Task Force, ix, xi.
\textsuperscript{30} Till, 47.
Second, the GFS is intended to focus on delivering comprehensive and coordinated regional engagements and stability, specifically Phase 0 operations, i.e., joint and multinational operations and interagency activities performed to dissuade or deter potential adversaries and to assure or solidify relationship with friends and allies. Such activities involve traditional security operations, mobile training teams, construction assistance, medical outreach, humanitarian assistance mission, disaster relief, and information sharing. Many of these are incorporated into the information exchanges and training exercises with partnership countries conducted by Task Group 40.9 in their pilot GFS and planned by Task Group 60.4 for their upcoming APS deployment.

As pilot programs, it is understandable for Task Groups 40.9 and 60.4 to begin with low level, less confrontational exercises in relatively predictable environments. Naval forces deployed in troublesome regions historically have had considerable value in shaping the strategic environment. Called “gunboat diplomacy,” the mere presence of Naval forces could deter potential adversaries, creating an optimal political context, reducing or sometimes obviating the need for high-intensity combative operations. A naval diplomatic campaign could win friends and influence people to collectively maintain order against threats to international sea-based trading systems ranging from crime to terrorism.

The GFS pilot programs emphasize shaping or preparatory actions, instead of more aggressive military operations which might face additional budgetary constraints. The GFS is meant to enable Naval assets to operate where there is a requirement across the maritime security spectrum, without the high overheads of a steaming carrier battle-group. Sea based stations would be designed to handle a range of responses at the more local level providing a less-cost, high-yield sea based option for achieving national objectives.

32 Till, v, 3-5.
33 Stephen Trimble, 3-4.
The GFS is a separate but complementary entity from a JSB. The GFS is dependent upon global maritime partnerships to be an enabler of the 1,000 ship Navy. Additionally, it must operate within the greater context of a joint campaign in conjunction with a JSB. Each addresses different phases of the joint campaign with different purposes and goals. GFS strategists deal with budgetary constraints attempting to jump-start the nascent development of a sea based force. Concurrently, JSB strategists deal with the projection of U.S. policy rapidly and deeply inside continental confines.34

C. PURPOSE

This thesis qualitatively evaluates organizational models based on needs, stakeholders and functions with an eye towards relevant and applicable organizational structures. The first concept is a maritime-oriented GFS model focused on Phase 0 and V operations. The other is a JSB command capable of conducting and supporting a multi-phase military campaign. These complimentary concepts would span the full range of sea basing requirements through the entire Joint campaign from start to finish and the start of the next cycle.

Currently, the GFS pilot programs involve traditional military organizational structures centered on a primary vessel as a logistics, command and control center.35 Task Group 40.9 consists of a command element, the crew of HSV-2, the Swift, and training teams from the Navy, Marine Corps, Coast Guard and State Department.36 As the GFS concept matures, the coordination of joint U.S. and inter-operating allied forces may require a structure that better balances military requirements of command, control and authority with semi-autonomous teams, all processed through the lens of politically rational decision making. GFS Commanders dealing with an array of expeditionary, cross-service and cross-

34 Defense Science Board Task Force, 12, 19.
36 Cynthia Clark.
cultural semi-autonomous teams with their requisite political and geographic concerns may need a more flexible and responsive structural capability.\textsuperscript{37}

Currently, the characteristics of a GFS and a JSB are being determined using a traditional top-down executive, management team. According to the Defense Science Board, a Joint Sea Base Program Office is listed as the first of the “dirty dozen” issues the Department of Defense (DoD) needs to address for a future sea basing capability. Managing a wide ranging, multi-service program will require a leadership structure and style that spans diverse disciplines and expertise.\textsuperscript{38} Earlier this year, the Government Accounting Office (GAO) determined that the DOD has not fully established a comprehensive management approach to effectively guide and assess joint sea basing and has not fully incorporated management practices, such as providing leadership, dedicating an implementation team, and establishing a communications strategy.\textsuperscript{39} The underlying assumption is that the structure and coordinating mechanisms for maintaining and executing these new GFS and JSB concepts will impact their effectiveness, including the management of politically sensitive strategies and operations, personnel, afloat and ashore logistics, and deployment and sustainment of semi-autonomous expert teams.

This thesis proposes a potential structure of a GFS command organization suitable to the mandates, missions and interrelatedness issues, with particular focus on maritime oriented, Phase 0 and V operations. A JSB organization supporting a prolonged and more intense inland campaign is used for comparison purposes. The paper begins with a systems engineering analysis of relevant concepts. Parameters describing needed characteristics will lead to the formulation of distinct organizational structures for each system. This thesis then concludes with an extensive description of each structure within a practical, systematic and methodical framework.

\textsuperscript{38} Defense Science Board Task Force, 47.
\textsuperscript{39} Government Accounting Office, 10.
II. METHODOLOGY

Figure 1. Pictorial Overview of Methodology

A. SYSTEMS ENGINEERING ANALYSIS

The terminology used in the subsequent analyses was based on the definitions listed in the glossary. A needs analysis identified the relevancy for the GFS and JSB, which would in turn identify their functions in a functional analysis. A stakeholder analysis identified all first- and second-order stakeholders for each. Functional architectures identified the functions unique and critical to the GFS and JSB.

A needs analysis was performed and summarized the background section of this thesis. Problems were defined in terms of what may be deficient concerning the current situation. Needs were defined in terms of the end goals or solutions to mitigate or resolve the defined problems. Relevancy was defined in terms of the potential mechanism to satisfy needs and address problems.

A stakeholder analysis was performed to identify the greatest number of stakeholders for the system (i.e., the GFS or JSB). A stakeholder was defined as any individual or group who has a stake in what the GFS or JSB is trying to accomplish. To limit the scope of the analysis, a threshold of relationships was reached.

---

arbitrarily established at the second order. Stakeholders were identified through iterative steps that continually identified more and more relevant individuals. First, a preliminary list of first- and second-order stakeholders was established over the course of the GFS/JSB life cycles from conception to disposal. Second, additional stakeholders were identified based on assumptions made and risks assumed by each stakeholder. Third, stakeholders were identified based on (1) their relationship with the GFS/JSB domain (boundary, internal or external element), (2) GFS/JSB functions (as described below through functional decompositions), (3) missions and objectives (based on the needs analysis previously described), and (4) their interests at stake with the GFS/JSB. Lastly, the resulting stakeholders were categorized into appropriately exclusive types in relation to the GFS/JSB.41

Each type of stakeholder was then examined according to several factors used in diagnosing their potential effect on the GFS or JSB. The potential impact of a stakeholder was determined through a combination of influence and the likelihood of each involved in an important interaction. Resource control, power, action, and coalitions involvement were factors used in diagnosing threat and cooperation potential. Based on the impact, threat and cooperation potential for each stakeholder type, general strategies for stakeholder management were predicted for both the GFS/JSB.42

Concurrently, functional decompositions were constructed for a top-level description of a GFS and of sea basing based on written literature.43 Lines of operation were initially used as the critical functions of sea basing.44 Additional references45 were used to elaborate on each function and ensure various

42 Grant Savage, et al., 64-7.
43 Benjamin Blanchard and Wolter J. Fabrycky, 84-86.
44 Department of Defense, 7.
interpretations of sea basing were taken into account. The major functions were realigned and abstracted to fit key words used commonly in GFS articles\textsuperscript{46}. Finally, the GFS/JSB concepts were combined with the Phases of Joint Operations\textsuperscript{47} to create an overall flowchart.

B. QUALITATIVE EVALUATION

Based on the relevancies, functions and stakeholders for the GFS/JSB from the previous systems engineering analysis, design parameters and contingency factors were examined. Elements within each domain served as the basis for each organization. These characteristics were then used to determine which of four organizational configurations and five structural configurations fit the descriptions of each.\textsuperscript{48} Lastly, the organizational designs were described in further detail through a structured, step-wise approach for analyzing the key variables of organizational success. These nine tests\textsuperscript{49} integrated the findings from the previous analyses into comprehensive descriptions of the GFS and JSB, addressing all critical aspects of each organization. The first four were fit tests providing an initial screen for design alternatives. The next five were good design tests to refine the prospective designs by addressing potential problem areas.

\begin{flushleft}
\textsuperscript{46} Mcavoy, “White Paper on Global Fleet Station.”
\textsuperscript{47} United States Joint Chiefs of Staff, \textit{Joint Operations}, IV-26-9.
\textsuperscript{49} Michael Goold and Andrew Campbell, 117-8.
\end{flushleft}
III. RESULTS

A. SYSTEMS ENGINEERING ANALYSIS

1. Needs Analysis

Based on the background section, specifically concentrating on a historical reference\textsuperscript{50}, problems, needs and relevancies are listed below.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure2.png}
\caption{Summary of Problems, Needs and Relevancy of GFS and JSB Leading to Systems' Functional Decompositions.}
\end{figure}

Past events lead to awareness of problems, which must be addressed. As operations become more concerned with building the peace in situations where societies are fractured and governments collapsed, expeditionary intervention operations may last longer than expected. Unless the scale and challenge of such sustainment requirements are met, poor planning and

\textsuperscript{50} Till.
insufficient time for preparations may result. Public opinion’s limited tolerance for casualties may make early and possibly decisive use of lethal ground forces more difficult.51 Also, adversaries with long histories, local political connections and topological knowledge in remote regions have an information advantage over U.S. forces with limited initial intelligence. The distributed nature of modern battlefields over land, sea and air across long distances can result in problematic lines of communication. Land bases are more open to threats applicable to the task of moving and storing supplies.

Such problems generate requirements, which must be met. There is a need for an agile logistics campaign as invulnerable as possible in response to reconfiguring forces and adapting operational plans to new environments. The fleet’s capacity to support operations ashore must meet the scale and challenges of any sustainment effort. The force ashore and the supply system must cope with the basic unpredictability and the diplomatic complications of the situation confronting them.52

Conflicts often unfold in a non-linear fashion generating a complex web of interrelated military and political dimensions. The U.S. Navy intends to revolutionize and transform the operations of expeditionary forces by improving operational access, enhancing their capacity for both forward defense and effective response across a spectrum that starts with crisis management and ends with forcible entry. Winning the peace and the war are closely intertwined. The GFS and the JSB together allow for the versatility to cope with the entire spectrum of non-war and war.53 GFS would aim to win the peace through crisis management, while the JSB would prosecute war through forcible entry operations. The relevancy of the U.S. Navy may lay in fulfilling the needs and overcoming the problems stated above.

51 Till, 22, 28-9, 34.
52 Till, 21-2, 34.
53 Till, 17, 31, 35.
2. Stakeholders Analysis

Possible first- and second-order stakeholders were identified through iterative steps described in the methodology section.

Figure 3. Depiction of Stakeholder Types During the Operational and Support Phase of Life Cycle as Elements in Relation to the JSB and GFS Domain

Internal elements are those individuals and entities within the domain of the system (i.e., those working in the GFS or JSB). A system is a set of elements (e.g., stakeholders) that are either dependent or independent, but interacting pair-wise, temporarily or physically, to achieve a common purpose. The boundary of the system represents the permanent and episodic interactions between elements, domains and other systems. The system boundary represents the lasting and occasional interactions and behaviors of a system or system of systems. First-order stakeholders include those in direct connection with the system, though not within the respective domain (i.e., those meeting with member of or interacting directly with the system). Second order stakeholders include those with indirect connection to the GFS/JSB domain through direct contact with first-order elements.

---

The primary stakeholders change as the project progresses through its life cycle. The number of stakeholders gradually rises as the project comes into existence as an operational system. The number reaches a maximum during the operations and support phase, before decreasing as the system gets replaced and disposed.
Figure 4. Primary Stakeholder Types Listed over the Life Cycle Phases of the Project and Graphed According to Their Potential Effect on Project Over Time.
Subsequent analyses were only made for the operations and support phases of the system’s life cycle, the only time interval when the GFS/JSB would be functional. While each type may consist of individual stakeholders with varying degrees of each factor, a representative was sought to get an overall view of each type.

Table 1. Stakeholders Listed According to Their Relationship Type to a GFS and a JSB.\textsuperscript{55}

<table>
<thead>
<tr>
<th>STAKEHOLDER TYPE</th>
<th>GLOBAL FLEET STATION</th>
<th>JOINT SEA BASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investor</td>
<td>U.S., allied, friendly nations</td>
<td>U.S., allied, coalition nations</td>
</tr>
<tr>
<td>Users</td>
<td>people in need, WMD survivors, IDP, local communities, underdeveloped maritime and</td>
<td>U.S., COCOMs</td>
</tr>
<tr>
<td></td>
<td>security foreign forces: emergency care workers, host nation government representatives,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>law enforcers, clinics, hospitals, health care providers, fishermen, natural resource</td>
<td></td>
</tr>
<tr>
<td></td>
<td>managers, teaching professionals, food distributors (grocers), farmers, local</td>
<td></td>
</tr>
<tr>
<td></td>
<td>commercial shipping operations</td>
<td></td>
</tr>
<tr>
<td>Conceptualizers</td>
<td>NPS, ONR, CNO</td>
<td>NPS, JCSC</td>
</tr>
<tr>
<td>Designers</td>
<td>NAVWARDEVCOM, JCIDS, NWDC, DECAS, GAO, General Services Administration, Defense</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Logistics Agency, Defense Acquisition Board, U.S. contracting office, program manager</td>
<td></td>
</tr>
<tr>
<td>Builders</td>
<td>commercial defense contractors, shipyards, naval bases</td>
<td></td>
</tr>
<tr>
<td>Infrastructure Supporters</td>
<td>U.S. and foreign airports, naval bases, commercial ports, maintenance crews, local</td>
<td>U.S. and allied airports, naval</td>
</tr>
<tr>
<td></td>
<td>construction crews, local financial and insurance companies</td>
<td>bases, commercial ports,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>maintenance crews</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STAKEHOLDER TYPE</th>
<th>GLOBAL FLEET STATION</th>
<th>JOINT SEA BASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infrastructure Providers</td>
<td>commercial shipping, transport, cargo companies, TRANSCOM, MSC, communications systems providers, SPAWAR, Assigned Vessels, bus drivers, train operators, commercial pilots and crews</td>
<td>commercial shipping, transport, cargo companies, TRANSCOM, MSC, AMC, SDDC, communications systems providers</td>
</tr>
<tr>
<td>Internal Personnel (Operating Core)</td>
<td>expeditionary, functional teams</td>
<td>subordinate commands</td>
</tr>
<tr>
<td>Operators</td>
<td>COCOMs, GFS crew</td>
<td>JTF, JSB crew</td>
</tr>
<tr>
<td>Customers</td>
<td>SYSCOM, American Public, Congress, U.S. taxpayers, IRS</td>
<td>SYSCOM</td>
</tr>
<tr>
<td>Participants</td>
<td>BUMED, NECC, FAO, DOS, ambassadors, DHS, Coast Guard, police, law enforcers, firefighters, allied and friendly operators, CIA, FBI, local knowledge providers, WMD inspectors, educators, trainers, oceanographers, meteorologists</td>
<td>Joint Forces, local and internal knowledge providers (Intel, Oceanography, Crypto)</td>
</tr>
<tr>
<td>Partners</td>
<td>other GFSs, U.S. and Allied battle groups, Interpol, friendly maritime forces, lawyers, prosecutors, judges, public sanitation engineers, desalination plants, gas station attendants, utility companies, financial institutions, recreational and tourist companies, supermarkets, farmers, civil servants, port security</td>
<td>allied, coalition forces, UN</td>
</tr>
<tr>
<td>Suppliers</td>
<td>commercial retailers, pharmaceutical industry, industrial manufacturers, hardware, software producers, parts suppliers, training facilities, academies, schools</td>
<td>commercial retailers, industrial manufacturers, hardware, software producers, parts suppliers, training centers, academies, schools</td>
</tr>
<tr>
<td>Competitors</td>
<td>Army, Air Force, peer competitors (France, Russia, Iran, China...), Rebellious Factions, Insurgents</td>
<td>nations impeding access, peer competitors, rebellious factions, insurgents, financial and military supporters of enemy regime</td>
</tr>
<tr>
<td>STAKEHOLDER TYPE</td>
<td>GLOBAL FLEET STATION</td>
<td>JOINT SEA BASE</td>
</tr>
<tr>
<td>-------------------------</td>
<td>--------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Adversaries</td>
<td>enemy nations, non-state, unlawful or insurgent organizations</td>
<td></td>
</tr>
<tr>
<td>U.S. Government Agencies</td>
<td>DOS, embassies, diplomats, Treasury Dept, congressional oversight committees, GAO, military and civilian intelligence agencies</td>
<td>DOS, Treasury, Justice Dept, GAO, congressional oversight committees, military intelligence agencies</td>
</tr>
<tr>
<td>International Organizations</td>
<td>UN, NATO, international treaty organizations, EU, multinational energy, mining, financial corporations, Merchant Marines</td>
<td>UN, NATO, bilateral treaty recipients</td>
</tr>
<tr>
<td>Foreign Governments</td>
<td>regional and neighboring governments, inter-governmental organizations, diplomatic representatives, third party maritime and military forces, neutral states</td>
<td>host nation, allied and coalition States, NATO, regional and neighboring governments, inter-governmental organizations, diplomatic representatives, third party maritime and military forces, neutral states</td>
</tr>
<tr>
<td>Activist Groups</td>
<td>regional, humanitarian NGOs (USAID, Red Cross, environmental groups), media, Veterans Associations, web communities, lobbyists, regional factors, journalists, anyone with a camera, churches, mosques, temples, local religious, cultural, social institutions, associated family and significant others of operators and other internal personnel</td>
<td>media, lobbyists, anyone with a camera, associated family and significant others of operators and other internal personnel</td>
</tr>
</tbody>
</table>
GFS and JSB Commanders must prioritize their efforts to meet the demands of stakeholders with the greatest impact to the system. To determine appropriate responses to various stakeholders, the potential for impact to the system was determined from the degree of influence the stakeholder would have on the system and from the importance a stakeholder action might be. Influence was based on the relationship of the stakeholder to the system domain. An arbitrary scale of one to twelve was used. Those internal to the domain had the greatest influence and therefore a twelve. Those external had the least with a one. Importance of stakeholder action was based on the number of interactions each stakeholder type had with all the other types. The greater the number of direct interactions one type had with the other players in the system, the greater likelihood any action taken by that stakeholder would affect the system as a whole, rather than just an isolated part of the system. The impact of a stakeholder is a combination of influence and importance of each stakeholder. To rank the stakeholders by their potential impact, the assigned influence and importance values were multiplied. The stakeholders were then listed with those having the highest impact at the top of the following Table.
Table 2. Impact of Stakeholder Types on the GFS/JSB System.

<table>
<thead>
<tr>
<th>STAKEHOLDER TYPE</th>
<th>INFLUENCE POSITION IN DOMAIN</th>
<th>IMPORTANCE (NO. OF INTERACTIONS)</th>
<th>IMPACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operators</td>
<td>12 (Internal)</td>
<td>11</td>
<td>132</td>
</tr>
<tr>
<td>Internal Personnel</td>
<td>12</td>
<td>11</td>
<td>132</td>
</tr>
<tr>
<td>Users</td>
<td>6 (First Order)</td>
<td>10</td>
<td>60</td>
</tr>
<tr>
<td>Adversaries</td>
<td>6</td>
<td>9</td>
<td>54</td>
</tr>
<tr>
<td>Designers</td>
<td>9 (Boundary)</td>
<td>5</td>
<td>45</td>
</tr>
<tr>
<td>Partners</td>
<td>9</td>
<td>5</td>
<td>45</td>
</tr>
<tr>
<td>Participants</td>
<td>9</td>
<td>5</td>
<td>45</td>
</tr>
<tr>
<td>Builders</td>
<td>9</td>
<td>5</td>
<td>45</td>
</tr>
<tr>
<td>Infrastructure Supporters</td>
<td>9</td>
<td>4</td>
<td>36</td>
</tr>
<tr>
<td>Activist Groups</td>
<td>6</td>
<td>5</td>
<td>30</td>
</tr>
<tr>
<td>Infrastructure Providers</td>
<td>9</td>
<td>3</td>
<td>27</td>
</tr>
<tr>
<td>Suppliers</td>
<td>9</td>
<td>3</td>
<td>27</td>
</tr>
<tr>
<td>International Organizations</td>
<td>3 (Second Order)</td>
<td>7</td>
<td>21</td>
</tr>
<tr>
<td>U.S. Government Agencies</td>
<td>3</td>
<td>7</td>
<td>21</td>
</tr>
<tr>
<td>Foreign Governments</td>
<td>3</td>
<td>7</td>
<td>21</td>
</tr>
<tr>
<td>Competitors</td>
<td>3</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Customers</td>
<td>1</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Investor</td>
<td>1</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Conceptualizers</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

While it would be expected that the operators and internal personnel central to the JSB/GFS system domain would have the greatest influence, importance and impact, the next two stakeholder types are noteworthy. As seen
in the needs analysis section, the adversaries cause the problems, which the users have a need to resolve. These two types define the relevancy of the system. The system’s primary function is to eliminate the problems caused by the adversaries and provide solutions to the users.
Each type was described using four factors for threat or cooperation potential for the GFS.

Table 3. Stakeholder Type Described Using Four Factors for Threat or Cooperation Potential for the GFS.

<table>
<thead>
<tr>
<th>GFS STAKEHOLDER</th>
<th>RESOURCE CONTROL</th>
<th>POWER</th>
<th>ACTION</th>
<th>COALITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investor</td>
<td>controls</td>
<td>more</td>
<td>supportive</td>
<td>may find other alternatives</td>
</tr>
<tr>
<td>Users</td>
<td>does not control</td>
<td>more</td>
<td>supportive</td>
<td>likely</td>
</tr>
<tr>
<td>Conceptualizers</td>
<td>does not control</td>
<td>less</td>
<td>supportive</td>
<td>likely</td>
</tr>
<tr>
<td>Designers</td>
<td>controls</td>
<td>more</td>
<td>supportive</td>
<td>likely</td>
</tr>
<tr>
<td>Builders</td>
<td>controls</td>
<td>more</td>
<td>supportive</td>
<td>likely</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>controls</td>
<td>less</td>
<td>supportive</td>
<td>likely</td>
</tr>
<tr>
<td>Supporters</td>
<td>controls</td>
<td>more</td>
<td>supportive</td>
<td>likely</td>
</tr>
<tr>
<td>Internal Personnel</td>
<td>does not control</td>
<td>less</td>
<td>supportive</td>
<td>likely</td>
</tr>
<tr>
<td>Operators</td>
<td>controls</td>
<td>more</td>
<td>supportive</td>
<td>likely</td>
</tr>
<tr>
<td>Customers</td>
<td>controls</td>
<td>more</td>
<td>supportive</td>
<td>likely</td>
</tr>
<tr>
<td>Participants</td>
<td>control</td>
<td>more</td>
<td>supportive</td>
<td>likely</td>
</tr>
<tr>
<td>Partners</td>
<td>control</td>
<td>more</td>
<td>supportive</td>
<td>may find other alternatives</td>
</tr>
<tr>
<td>Suppliers</td>
<td>controls</td>
<td>less</td>
<td>supportive</td>
<td>likely</td>
</tr>
<tr>
<td>Competitors</td>
<td>does not control</td>
<td>more</td>
<td>non-supportive</td>
<td>unlikely</td>
</tr>
<tr>
<td>Adversaries</td>
<td>does not control</td>
<td>more</td>
<td>non-supportive</td>
<td>unlikely</td>
</tr>
<tr>
<td>U.S. Government</td>
<td>controls</td>
<td>more</td>
<td>supportive</td>
<td>may find other alternatives</td>
</tr>
<tr>
<td>Agencies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>International</td>
<td>controls</td>
<td>more</td>
<td>scenario dependent</td>
<td>may find other alternatives</td>
</tr>
<tr>
<td>Organizations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign Governments</td>
<td>controls</td>
<td>more</td>
<td>scenario dependent</td>
<td>may find other alternatives</td>
</tr>
<tr>
<td>Activist Groups</td>
<td>controls</td>
<td>more</td>
<td>supportive</td>
<td>likely</td>
</tr>
</tbody>
</table>
Table 4. Stakeholder Type Described Using Four Factors for Threat or Cooperation Potential for the JSB.

<table>
<thead>
<tr>
<th>JSB STAKEHOLDER</th>
<th>RESOURCE CONTROL</th>
<th>POWER</th>
<th>ACTION</th>
<th>COALITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investor</td>
<td>controls</td>
<td>more</td>
<td>supportive</td>
<td>may find other alternatives</td>
</tr>
<tr>
<td>Users</td>
<td>controls</td>
<td>more</td>
<td>supportive</td>
<td>likely</td>
</tr>
<tr>
<td>Conceptualizers</td>
<td>does not control</td>
<td>less</td>
<td>supportive</td>
<td>likely</td>
</tr>
<tr>
<td>Designers</td>
<td>controls</td>
<td>more</td>
<td>supportive</td>
<td>likely</td>
</tr>
<tr>
<td>Builders</td>
<td>controls</td>
<td>more</td>
<td>supportive</td>
<td>likely</td>
</tr>
<tr>
<td>Infrastructure Supporters</td>
<td>controls</td>
<td>less</td>
<td>supportive</td>
<td>likely</td>
</tr>
<tr>
<td>Infrastructure Providers</td>
<td>controls</td>
<td>less</td>
<td>supportive</td>
<td>likely</td>
</tr>
<tr>
<td>Internal Personnel</td>
<td>does not control</td>
<td>less</td>
<td>supportive</td>
<td>likely</td>
</tr>
<tr>
<td>Operators</td>
<td>controls</td>
<td>more</td>
<td>supportive</td>
<td>likely</td>
</tr>
<tr>
<td>Customers</td>
<td>controls</td>
<td>more</td>
<td>supportive</td>
<td>likely</td>
</tr>
<tr>
<td>Participants</td>
<td>does not control</td>
<td>same</td>
<td>supportive</td>
<td>may find other alternatives</td>
</tr>
<tr>
<td>Partners</td>
<td>does not control</td>
<td>same</td>
<td>supportive</td>
<td>may find other alternatives</td>
</tr>
<tr>
<td>Suppliers</td>
<td>controls</td>
<td>less</td>
<td>supportive</td>
<td>likely</td>
</tr>
<tr>
<td>Competitors</td>
<td>does not control</td>
<td>more</td>
<td>non-supportive</td>
<td>unlikely</td>
</tr>
<tr>
<td>Adversaries</td>
<td>does not control</td>
<td>scenario dependent</td>
<td>non-supportive</td>
<td>unlikely</td>
</tr>
<tr>
<td>U.S. Government Agencies</td>
<td>does not control</td>
<td>less</td>
<td>supportive</td>
<td>likely</td>
</tr>
<tr>
<td>International Organizations</td>
<td>does not control</td>
<td>less</td>
<td>scenario dependent</td>
<td>unlikely</td>
</tr>
<tr>
<td>Foreign Governments</td>
<td>does not control</td>
<td>less</td>
<td>scenario dependent</td>
<td>unlikely</td>
</tr>
<tr>
<td>Activist Groups</td>
<td>does not control</td>
<td>less</td>
<td>non-supportive</td>
<td>unlikely</td>
</tr>
</tbody>
</table>
The stakeholder types were then categorized according to their potential for threat and cooperation.

![Figure 6. Stakeholders Types with Respect to the Potential as a Threat or for Cooperation.](chart)

Based on the stakeholder analysis, the majority of the GFS were mixed blessing stakeholders. Mixed blessing stakeholders would have high potentials to threaten and to cooperate with the GFS. Commanders in a GFS would concentrate a majority of their time balancing multiple collaboration strategies in stakeholder management.\(^{56}\) The impact of any one stakeholder type listed in the mixed blessing box is less than that of the users and adversaries. However, due to the sheer number of mixed blessing stakeholders, GFS Commanders may find themselves dealing with these types more often than completing an assigned

\(^{56}\) Savage, et al., 67.
mission, whether it be to the aid of a user or to eliminate an adversary. The function of the GFS must therefore be more collaborative in nature rather than adversarial.

Unlike the GFS, the JSB had a majority of supportive stakeholders. Supportive stakeholders are unlikely to serve as potential threats, but have high potentials for cooperation. While JSB Commanders would need to involve its numerous supportive stakeholders to maximize their cooperative potential, JSB Commanders would focus a far greater portion of their time and effort towards the users and the adversaries previously shown to have the greatest impact on the JSB. The JSB becomes the subordinate command to the user, whereas the users for a GFS are the people in need. This shifts the user to become a mixed blessing stakeholder rather than a supportive one for the GFS. ⁵⁷ Due to the combative nature in a military setting, the JSB would achieve its mission by reducing, preferably eliminating, an adversary’s effect in an area, deter an adversary from action, seize the initiative or dominate the adversary. These four interactions focused on its adversaries are elaborated in subsequent functional analyses.

⁵⁷ Savage, et al., 65-6.
3. Functional Architecture

At the top of the functional flowchart is the ultimate aim of the U.S. Military, to defend our Nation against its enemies.\textsuperscript{58} To meet the need of protecting U.S. interests abroad, the U.S. Navy can choose to project a more cooperative image through partnerships and alliances and/or project direct and decisive power in a more forceful campaign.\textsuperscript{59} As stated in the needs analysis, there is a dichotomy of roles. In one scenario, the U.S. would empower others to act in concert with its own forces. In the other, the U.S. would play a dominate role. Beneath these critical functions are the Phases 0-V in a Joint operations campaign, from shaping to enabling civilian authority.\textsuperscript{60} Additionally, there are transfer and support functions relevant to all Phases of a Joint campaign and to all methods of defending U.S. national interests.

\textsuperscript{58} George W. Bush, 1.
\textsuperscript{59} Vern Clark, 1.
\textsuperscript{60} United States Joint Chiefs of Staff, \textit{Joint Operations}, IV-26-9.
Figure 7. Functional Decomposition of the U.S. Military Leading to the Purposes of the GFS and JSB and Their Mutual Transfer Functions.
In scaling the level of combat intensity according to the Phases of a Joint campaign, Phases 0 (Shape) would start at a relatively low level of violence and instability. As a campaign progresses to the next Phase, the level of violence and instability also increases to culminate in Phase III (Dominate). Then, the level would decrease down to Phase V (Enable Civil Authority) before returning to Phase 0. Reconstitution is considered a distinct and separate function applicable across the combat spectrum in this paper, since it involves activities separate from those enabling civil authority, though in Joint doctrine it is designated within Phase V operations. The need to show a positive image decreases as the need for more forceful and uncompromising methods of resolution rises. Matching these phases with the purposes of each, a GFS would

---

61 Modified Diagram after Figure IV-6 in United States Joint Chiefs of Staff, *Joint Operations*, IV-26.
operate at the low intensity scenario or Phases 0 and V while a JSB would operate in a high intensity scenario throughout the majority of a military campaign. Fulfillment of the needs of these two war/non-war scenarios would match the characteristics of a JSB and a GFS respectively as stated in the needs and stakeholder analyses.

Sustaining, assembling, coordinating, closing and reconstituting are relevant to both GFS and JSB and are named transfer functions in this context. As stated in the needs analysis, the basic requirements for both the GFS and the JSB are to project and sustain operations ashore and to overcome the unpredictability of a situation through mobility and knowledge flow. These concepts match all but one of the five lines of operation, initially used as the primary functions of sea basing. Coordinating replaces employing, since force employment is different for the GFS and JSB. The lines of operations are the connections that define the directional orientation of the force in time and space in relation to the enemy. They connect the force with its base of operations and its objectives. They are defined in the Glossary section.

---

62 Department of Defense, 10-12.
Figure 9. Architecture of Transfer Functions. Five Transfer Functions are Listed at the Bottom.
Showing a convincing positive image (e.g., as a benevolent regional influence) is one approach to protecting American interests abroad. This more collaborative strategy matches the stakeholder analysis developed for the GFS. Although often termed “brand marketing” in the private sector, public or defense organizations can shape and influence an area of interest. Shaping can involve controlling and preparing the maritime area of interest for U.S. involvement, providing flexible forces to fit the necessary needs of the area, and preventing potential adversaries from developing and strengthening opposing footholds. Portraying the U.S. in a benevolent image could revolve around the strategies of empowering and transferring responsibilities to local and civil authorities, while playing a relatively minor role in resolving disputes. The purpose of the GFS would be to fulfill these overall functions denoted as Phases 0 and V of a Joint campaign.
Figure 10. Elaboration of Global Fleet Station Functions, Based on the Primary Function of Showing an Image and the Secondary Function of Phases 0 and V of a Joint Campaign.
A more direct method of protecting American interests abroad is the application of military power projection. Projecting power can revolve around the clear conveyance of an impression of strength or thrusting assets forward. This focus on elimination of an adversary matches the stakeholder analysis for the JSB. A projection of power involves stabilizing or securing an area or through deterrence or through seizing the initiative or dominating the scenario. The purpose of a JSB would be to fulfill these overall functions from Phases I through IV of a Joint campaign.
Figure 11. Elaboration of Joint Sea Basing Functions, Based on the Primary Function of Projecting Power and the Secondary Functions of Phases I to IV of a Joint Campaign.
B. QUALITATIVE EVALUATION

Stakeholders within the GFS or JSB system domain, the internal and boundary elements from the previous stakeholder analysis, were matched according to the basic parts of an organization. The operators are the managers in the strategic apex and the middle line. The internal personnel are the operating core. The support staff consists of stakeholders providing and supporting the system while outside the system’s operating workflow. The technostructure consists of agencies standardizing the process within the system.

![Reclassification of Internal and Boundary Stakeholders according to Mintzberg’s Basic Parts of an Organization.](image)

Figure 12. Reclassification of Internal and Boundary Stakeholders according to Mintzberg's Basic Parts of an Organization.

Each part of the organization interacts with its own set of stakeholders. While the users for a GFS are the people in need with direct contact to the operating core, the users of a JSB are the superior officers presiding over the strategic apex. Adversaries for both are dealt with by the operating core. The support staff in turn have their own infrastructure supporters. The technostructure has external elements which fund and direct their activities.

---

Using the basic system configuration, the GFS/JSB command structures were distinguished according to one of five possibilities. Design parameters were matched to the concepts of a GFS/JSB to choose one for each.

Table 5. Design Parameters for GFS and JSB.

<table>
<thead>
<tr>
<th>DESIGN PARAMETERS</th>
<th>GLOBAL FLEET STATION</th>
<th>JOINT SEA BASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Specialization</td>
<td>Job Expansion: dealing with a variety of nations, organizations, and U.S. agencies</td>
<td>High Horizontal, Low Vertical Job Specialization: professionals focused on mission success</td>
</tr>
<tr>
<td>Behavior Formalization</td>
<td>Formalized by job (Navy), by rules (Army Doctrine)</td>
<td>Organic: prevent adversary from predicting and control situation</td>
</tr>
<tr>
<td>Training and Indoctrination</td>
<td>Training: professional development; internalized norms and standards</td>
<td>Indoctrination: important role in managerial ranks Training: professional development</td>
</tr>
<tr>
<td>Unit Grouping</td>
<td>Social Interdependencies: grouping by client, what the situation needs to achieve social benefit</td>
<td>Process Interdependencies: functional grouping by services and areas of responsibility</td>
</tr>
<tr>
<td>Unit Size</td>
<td>The greater the use of standardization for coordination, the larger the size of the work unit</td>
<td>The greater the reliance on mutual adjustment, the smaller the size of the work unit; interdependencies among complex tasks; need for members to have frequent access to the manager for consultation or advice</td>
</tr>
<tr>
<td>Planning and Control Systems</td>
<td>Each unit has distinct outputs; regulated by performance controls</td>
<td>Action Planning imposes specific decisions and actions to be carried out at specific points in time</td>
</tr>
<tr>
<td>Liaison Devices</td>
<td>Integrating manager to coordination through mutual adjustment by all parties; decision process cut across affected departments without formal authority over departmental personnel</td>
<td>Task Force: committee formed to accomplish a particular task and then disband</td>
</tr>
</tbody>
</table>

---

<table>
<thead>
<tr>
<th>DESIGN PARAMETERS</th>
<th>GLOBAL FLEET STATION</th>
<th>JOINT SEA BASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vertical Decentralization</td>
<td>Parallel vertical decentralization: grant the power to function quasi-autonomously, regulated primarily by performance control systems</td>
<td>Selective vertical decentralization: associated work constellations grouped on a functional basis, coordinate its decision making largely by mutual adjustment</td>
</tr>
<tr>
<td>Horizontal Decentralization</td>
<td>Power to experts: Need for specialized knowledge with decisions highly technical; experts attain considerable informal power; the more professional, the more decentralized in both dimensions</td>
<td>Power to experts: artificial distinction between line and staff, formal authority and expertise to advise</td>
</tr>
</tbody>
</table>
Contingency factors\textsuperscript{65} were matched to the concepts of a GFS and a JSB.

Table 6. Contingency Factors for GFS and JSB.

<table>
<thead>
<tr>
<th>CONTINGENCY FACTORS</th>
<th>GLOBAL FLEET STATION</th>
<th>FLEET</th>
<th>JOINT SEA BASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>New; but it must develop into a larger organization, more elaborate in structure, more specialized in tasks, more differentiated in units, more developed in administration.</td>
<td>Established, formalized roles</td>
<td></td>
</tr>
<tr>
<td>Size</td>
<td>The larger the organization, the larger the size of its average unit</td>
<td>Small group</td>
<td></td>
</tr>
<tr>
<td>Technical System</td>
<td>The more sophisticated the technical system, the more elaborate the administrative structure, the larger and more professional support staff, the greater the selective decentralization and the greater use of liaison devices</td>
<td>Outputs are nonstandard, unit producers' operating work not formalized, structure organic</td>
<td></td>
</tr>
<tr>
<td>Environment</td>
<td>Stable, complex, diverse, munificent: bureaucratic, decentralized, professional structure; predictable work - standardize; difficult to comprehend - decentralize</td>
<td>Dynamic, complex, diverse, hostile: drive towards organic, decentralized structure</td>
<td></td>
</tr>
<tr>
<td>Power</td>
<td>Greater external control by media, politicians and military superiors, more standardized and formalized structure</td>
<td>Centralized power</td>
<td></td>
</tr>
</tbody>
</table>

Based on the dimensions of the five configurations,\textsuperscript{66} the GFS matched all but one of the design parameters and contingency factors for the professional bureaucracy. Due to the GFS as a primarily military entity, a bureaucratic formalization of behavior was initially selected. Most significantly, the GFS operates complex but stable Phase 0 and V operations with a wide range of

\textsuperscript{65} Mintzberg, The Structuring of Organizations: A Synthesis of Research, 215-298.

\textsuperscript{66} Henry Mintzberg, "Organization Design: Fashion or Fit?" 107.
trained and indoctrinated specialists. These factors eliminates the simple structure with too much control and responsibility on the chief executive. Both the machine bureaucracy and the divisionalized form generate standardizations of work and output within a simple environment with few liaison devices and limited decentralization. These traits do not fit with a GFS organization dependent on multi-agency and multi-national agents requiring coordination and mutual cooperation.

Table 7. GFS Associated Elements\textsuperscript{67} Highlighted Showing the Match to a Professional Bureaucracy.

\begin{table}
\begin{tabular}{|c|c|c|c|c|}
\hline
 & Simple structure & Machine bureaucracy & Professional bureaucracy & Divisionalized forms & Adhocracy \\
\hline
Key means of coordination & Direct supervision & Standardization of work & Standardization of skills & Standardization of outputs & Mutual adjustment \\
\hline
Key part of organization & Strategic apex & Technostructure & Operating core & Middle line & Support staff (with operating core in operating adhocracy) \\
\hline
Structural elements & Little specialization & \begin{tabular}{c} Much horizontal and vertical specialization \end{tabular} & \begin{tabular}{c} Much horizontal specialization \end{tabular} & \begin{tabular}{c} Some horizontal and vertical specialization (between divisions and headquarters) \end{tabular} & \begin{tabular}{c} Much horizontal specialization \end{tabular} \\
Specialization of jobs & Little formalization – organic & \begin{tabular}{c} Much formalization – bureaucratic \end{tabular} & \begin{tabular}{c} Little formalization – bureaucratic \end{tabular} & \begin{tabular}{c} Much formalization (within divisions) – bureaucratic \end{tabular} & \begin{tabular}{c} Little formalization – organic \end{tabular} \\
Training and indoctrination & Little training and indoctrination & \begin{tabular}{c} Much training and indoctrination \end{tabular} & \begin{tabular}{c} Some training and indoctrination (of division managers) \end{tabular} & \begin{tabular}{c} Much training \end{tabular} \\
Grouping & Usually functional & Usually functional & Functional and market & Market \\
Unit size & Wide & Wide at bottom, narrow elsewhere & Wide at bottom, narrow elsewhere & Wide at top & Narrow throughout \\
Planning and control systems & Little planning and control & Action planning & Little planning and control & \begin{tabular}{c} Much performance control \end{tabular} & \begin{tabular}{c} Limited action planning (esp. in administrative adhocracy) \end{tabular} \\
Liaison devices & Few liaison devices & Liaison devices in administration & Few liaison devices & Many liaison devices throughout & Many liaison devices throughout \\
Decentralization & Centralization & Limited horizontal decentralization & Horizontal and vertical decentralization & Limited vertical decentralization & Selective decentralization \\
Situational elements & Typically young and small & Typically old and large & Varies & Typically old and very large & Typically young operating adhocracy \\
Age and size & Simple, not regulating & Regulating but not automated, not very complex & Not regulating or complex & Divisible, otherwise like machine bureaucracy & Very complex; often automated (in administrative adhocracy), not regulating or complex (in operating adhocracy) \\
Technical system & Simple and dynamic; sometimes hostile & Simple and stable & Complex and stable & Relatively simple and stable; diversified markets (esp. products and services) & Complex and dynamic; sometimes disparate (in administrative adhocracy) \\
Environment & Chief executive control; often owner managed; not fashionable & Professional operator control; fashionable & Middle-line control; fashionable (esp. in industry) & Expert control, very fashionable & \\
Power & \end{tabular}
\end{table}

\textsuperscript{67} Modified after Exhibit III in Mintzberg, "Organization Design: Fashion or Fit?" 107.
The design parameters and contingency factors of the JSB matched all of those for the adhocracy. The JSB operates in a complex and dynamic environment requiring unpredictable solutions from an organic, highly trained command structure. This dynamism prevents a JSB from successfully configured as a bureaucracy (e.g., machine, professional or divisionalized) whose standardizations would lead to results that any adversary could anticipate and exploit. Also, due to the nature of a Joint organization trying to overcome the political and organizational divisions inherent within the present U.S. military bureaucracy, it would be self-defeating to have yet another bureaucracy as the solution. While the unpredictability factor applies to the simple structure, a JSB must also have horizontal specialization to utilize the full range of possibilities all the services in the U.S. military can offer, requiring liaison devices and expertise beyond the capabilities of any one individual, even a chief executive.

---

68 Mintzberg, "Organization Design: Fashion or Fit?" 107.
Table 8. JSB Associated Elements\textsuperscript{69} Highlighted Showing the Match to an Adhocracy.

<table>
<thead>
<tr>
<th>Simple structure</th>
<th>Machine bureaucracy</th>
<th>Professional bureaucracy</th>
<th>Divisionalized form</th>
<th>Adhocracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key means of coordination</td>
<td>Direct supervision</td>
<td>Standardization of work</td>
<td>Standardization of skills</td>
<td>Standardization of outputs</td>
</tr>
<tr>
<td>Key part of organization</td>
<td>Strategic apex</td>
<td>Technostructure</td>
<td>Operating core</td>
<td>Middle line</td>
</tr>
</tbody>
</table>

| Structural elements |  |
|---------------------|--------------------------|--------------------------|---------------------|-----------|
| Specialization of jobs | Little specialization | Much horizontal and vertical specialization | Much horizontal specialization | Some horizontal and vertical specialization (between divisions and headquarters) | Much horizontal specialization |
| Training and indoctrination | Little training and indoctrination | Little training and indoctrination | Much training and indoctrination | Some training and indoctrination of division managers | Much training |
| Grouping | Usually functional | Usually functional | Functional and market | Market | Functional and market |
| Unit size | Wide | Wide at bottom, narrow elsewhere | Wide at bottom, narrow elsewhere | Wide at top | Narrow throughout |
| Planning and control systems | Little planning and control | Action planning | Little planning and control | Much performance control | Limited action planning (esp. in administrative adhocracy) |
| Liaison devices | Few liaison devices | Liaison devices in administration | Few liaison devices | Liaison devices throughout | Many liaison devices throughout |
| Decentralization | Centralization | Limited horizontal decentralization | Limited vertical decentralization | Selective decentralization |

| Situational elements |  |
|---------------------|--------------------------|---------------------|-----------|
| Age and size | Typically young and small | Typically old and large | Varies | Typically old and very large | Typically young (operating adhocracy) |
| Technical system | Simple, not regulating | Regulating but not automated, not very complex | Not regulating or complex | Divisible, otherwise like machine bureaucracy | Very complex, often automated (in administrative adhocracy), not regulating or complex (in operating adhocracy) |
| Environment | Simple and dynamic; sometimes hostile | Simple and stable | Complex and stable | Relatively simple and stable; diversified markets (esp. products and services) | Complex and dynamic; sometimes disparate (in administrative adhocracy) |
| Power | Chief executive control; often owner managed; not fashionable | Technocratic and external control; not fashionable | Professional operator control; fashionable | Middle-line control; fashionable (esp. in industry) | Expert control, very fashionable |

\textsuperscript{69} Modified after Exhibit III in Mintzberg, "Organization Design: Fashion or Fit?" 107.
Out of four organizational configurations, characteristics\textsuperscript{70} were matched to those of a GFS and a JSB to choose one for each.

Table 9. Organizational Characteristics for GFS and JSB.

<table>
<thead>
<tr>
<th>CHARACTERISTIC</th>
<th>GLOBAL FLEET STATION</th>
<th>JOINT SEA BASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness</td>
<td>Low</td>
<td>High: optimize mission success.</td>
</tr>
<tr>
<td>Efficiency</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>High: ideal type in a political economy which requires organizations be accountable to the public by anticipating and responding to its concerns.</td>
<td>Low: not generally, politically accountable.</td>
</tr>
<tr>
<td>Additional Properties</td>
<td>Purpose: Play politics External Environment: competing coalitions; stakeholder conflicts Organizational Coordination through interplay of politics and coalitions Implementation with lack of coherence among organizational parts Central Skills: manages crises; forms coalitions; bargains and negotiates</td>
<td>Direction Setting and Planning: Vision and values drive from top Organizational coordination through task forces and coordinating committees Organizational norms: teamwork; creativity; flexibility Central Skills: inspires others to action; builds enthusiasm and commitment; articulates vision</td>
</tr>
</tbody>
</table>

The characteristics of a GFS best matched those of a responsive organization.\textsuperscript{71} These characteristics do not match those of a directive organization since the GFS operates in an environment that is complex. Because every situation may be different, from disaster relief to training exercises to anti-piracy operations, there can be no top-down, directive hierarchy of goals or standard operating procedures existent within a GFS organization. Concurrently, its responsibilities as a primarily political entity prevents the GFS

\textsuperscript{70} Roberts, 217-233.

\textsuperscript{71} Roberts, 221-3.
from having the creativity and flexibility of an adaptive organization. Lastly, without further development and a more established reputation, the GFS cannot reach the effectiveness and efficiency of a generative organization.

The characteristics of a JSB best matched those of an adaptive organization. With fewer mixed-blessing stakeholders than the GFS, the JSB does not need to deal with competing coalitions and stakeholder conflicts to the level a responsive organization does. Being in a dynamic, hostile environment, a JSB cannot have the formalized routines of a directive organization based on standardized rules. Since sea basing is a relatively new concept, Joint Commanders still lack the experience to form the JSB as a generative organization, empowering self-organizing teams and ventures to successfully align the strategic vision of joint sea basing with action planning to execute that vision onto the battlefield.
Based on the design parameters, contingency factors\textsuperscript{73} and dimensions of efficiency and effectiveness, a GFS fits the description of a responsive, professional bureaucracy, whereas a JSB fits the description of an adaptive adhocracy.

\textsuperscript{72} Modified Figure 1 in Roberts, 220.

\textsuperscript{73} Mintzberg, "Organization design: fashion or fit?" 107.
C. ORGANIZATIONAL TEST

To further examine the GFS and JSB organizations, a practical framework was used to guide the examination through the aspects of each design.74

Table 10. Organizational Framework for GFS and JSB.

<table>
<thead>
<tr>
<th>TEST</th>
<th>GLOBAL FLEET STATION</th>
<th>JOINT SEA BASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Advantage Test</td>
<td>matching overall function from functional architecture to the users in the stakeholder analysis</td>
<td>developing countries with people in need</td>
</tr>
<tr>
<td></td>
<td></td>
<td>commanders with need for power projection from afloat to ashore</td>
</tr>
<tr>
<td></td>
<td>define target market segment</td>
<td>matching Mintzberg organization with target market segment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>operating core consists of mobile, expeditionary teams tailored to each market segment for scenario based humanitarian and/or security missions</td>
</tr>
<tr>
<td></td>
<td>single unit dedicated to a single segment</td>
<td>operating core truncated to focus administrative adhocracy on directing the mechanisms and creating solutions for projecting power ashore</td>
</tr>
<tr>
<td></td>
<td>support key sources of advantage and related operating initiatives</td>
<td>matching organizational configuration with target market segment</td>
</tr>
<tr>
<td></td>
<td>responsive to difficult and dangerous scenarios</td>
<td>efficiency for mission success</td>
</tr>
<tr>
<td>Parenting Advantage Test</td>
<td>from functional architecture</td>
<td>shaping, enabling civil governments</td>
</tr>
<tr>
<td></td>
<td>higher-level activities that provide real value to the overall company</td>
<td>stabilization, deterrence, seizing the initiative, dominance</td>
</tr>
<tr>
<td></td>
<td>give sufficient attention to value-adding tasks and initiatives</td>
<td>ensure support staff adequately perform transfer functions from functional architecture</td>
</tr>
<tr>
<td>People Test</td>
<td>match the attributes of personnel in the strategic apex to demands based on stakeholder analysis and organization configuration and structure</td>
<td></td>
</tr>
</tbody>
</table>

---

74 Goold and Campbell, 117-8.
<table>
<thead>
<tr>
<th>TEST</th>
<th>GLOBAL FLEET STATION</th>
<th>JOINT SEA BASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>commitment</td>
<td>responsive, collaborative administrators able to balance the demands of the professional experts in the operating core</td>
<td>experienced in driving efficiency within fluid structure of adhocracy while serving as liaison to primary stakeholder: COCOM.</td>
</tr>
<tr>
<td>highly talented people staffing pivotal jobs</td>
<td>ensure technostructure properly staff the strategic apex, middle line and operating core</td>
<td></td>
</tr>
<tr>
<td>identify and deal with losers in reorganization</td>
<td>decreased role of Navy and realignment of power structure away from traditional military chain of command</td>
<td>personnel anxious to micromanage partners and participants in operating core</td>
</tr>
<tr>
<td></td>
<td></td>
<td>personnel unable to yield authority within organic, unorthodox culture</td>
</tr>
<tr>
<td>Feasibility Test</td>
<td></td>
<td></td>
</tr>
<tr>
<td>government regulations</td>
<td>must be particularly sensitive to respecting host nation cultural, social and political constraints</td>
<td>follow guidance from JTF</td>
</tr>
<tr>
<td>stakeholders</td>
<td>see results from stakeholder analysis</td>
<td></td>
</tr>
<tr>
<td>information system</td>
<td>ensure coordination functions are in sync with the changing realignment. based on contingency factor, technological systems.</td>
<td></td>
</tr>
<tr>
<td>corporate culture</td>
<td>see identifying losers in people test</td>
<td></td>
</tr>
<tr>
<td></td>
<td>since other government agencies already employ the professional bureaucracy model, such a transition should not be too disruptive.</td>
<td>truncating operating core from JSB adhocracy to isolate it from rest of Joint chain of command</td>
</tr>
<tr>
<td>Specialist Cultures Test</td>
<td></td>
<td></td>
</tr>
<tr>
<td>specialist cultures insulated from the rest of organization</td>
<td>professional experts with extensive autonomy</td>
<td>truncate operating core from JSB adhocracy</td>
</tr>
<tr>
<td>any in danger of being dominated</td>
<td>based on contingency factor, power.</td>
<td>JSB Commander must protect the adhocracy from external interference</td>
</tr>
<tr>
<td></td>
<td>power flows from the professional experts up to the GFS Commanders, who are focused on managing the support staff and resisting interference from military superiors</td>
<td></td>
</tr>
<tr>
<td>Difficult Links Test</td>
<td></td>
<td></td>
</tr>
<tr>
<td>links are self-managed networking among units</td>
<td>based on design parameters, unit grouping, liaison devices, and decentralization</td>
<td></td>
</tr>
<tr>
<td>TEST</td>
<td>GLOBAL FLEET STATION</td>
<td>JOINT SEA BASE</td>
</tr>
<tr>
<td>------</td>
<td>----------------------</td>
<td>----------------</td>
</tr>
<tr>
<td></td>
<td>support staff enable links between teams in operating core, liaison devices ensure mutual adjustment for coordination</td>
<td>entire structure based on fluid interdependent relationships between strategic apex, technostructure, support staff and middle line</td>
</tr>
</tbody>
</table>

**Redundant Hierarchy Test**

- each level improve performance of units underneath
  - based on design parameter, decentralization.
  - three levels: GFS Commanders in strategic apex, liaison devices constitute middle line, GFS teams in operating core
  - critical structure level between JTF and subordinate commands for maximum innovation

- every level has access to skills and resources it needs
  - ensure support staff and technostructure adequately perform transfer functions from functional architecture

**Accountability Test**

- any units with shared responsibilities
  - middle line managers serve as liaison devices must clarify overlapping responsibilities
  - dedicated working group solely devoted to finding sea basing solutions

- any units with performances difficult to measure
  - performance measurements based on execution of expertise skill set, overseen by technostructure
  - measurements based on successful execution of transfer functions within JTF mission

**Flexibility Test**

- support the pursuit of future opportunities
  - changes in operating core performance delegated to technostructure
  - adhocracy chosen for maximal innovation through liberal distribution of power among all involved

- identify pockets of resistance
  - see identifying losers in people test

Along with brand marketing of a positive U.S. image and influence abroad (as noted in the GFS functional architecture), the GFS would need to be accountable to the American public and the international community by anticipating and responding to their concerns.\(^{75}\) Within such a political environment, a GFS appears most appropriate in a responsive professional bureaucratic configuration. As a responsive organization, the GFS must be

---

\(^{75}\) Roberts, 232.
accountable to a great number of stakeholders, responding to their concerns while managing their conflicts of interests. A GFS configured as a professional bureaucracy would be intended to incorporate the standardization of specialized skills, typically learned elsewhere, i.e., similar to hospitals and universities whose doctors and professors comprise the “professional” cores respectively, both groups composed of somewhat interchangeable experts. What would exemplify the GFS would be the expertise it collects, maintains and manages. A GFS would tend to operate in relatively stable environments based on Phases 0 and V of a Joint campaign. While the scenario is devoid of the intense violence occurring in more advanced stages of a Joint campaign, a GFS would still need to meet a complex set of expectations as designated in its functional architecture.\textsuperscript{76}

For a JSB, the environment is the chaos and complexity of war, i.e.,, the purpose being to project American power sufficient to return the situation back to one more suitable for a GFS. As a Joint campaign advances beyond Phase 0, the JSB may encounter increasingly new and relatively unprecedented scenarios. One view is that to succeed in these chaotic domains, JSB and JTF solutions would also encompass systematic and atypical actions. While a JSB could be incorporated within a Joint Task Force (JTF) structure, an adhocracy structure might provide the flexibility and dynamism needed for interchangeable experts to quickly respond to the array of challenges in an A2AD scenario.\textsuperscript{77} The jointness of a JSB also necessitates liaison devices involving personnel in overlapping responsibilities and chains of command. Flexibility, creativity, exploration and experimentation would be crucial components of an adaptively configured JSB, i.e., an adaptive focus, even at the expense of efficiency losses.\textsuperscript{78}

\textsuperscript{76} Mintzberg, The Structuring of Organizations: A Synthesis of Research, 366-71.
\textsuperscript{77} Mintzberg, The Structuring of Organizations: A Synthesis of Research, 449-60.
\textsuperscript{78} Roberts, 226.
IV. DISCUSSION

A. THE GLOBAL FLEET STATION

Based on the analysis of parameters in the results section, the Global Fleet Station may perform best as a responsive professional bureaucracy, i.e., a decentralized bureaucracy in a stable operating work environment leading to predetermined, predictable or standardized behavior. Duly trained and interchangeable specialists operating in flexible, expeditionary force teams would describe this type of GFS. Specialist teams comprising the operating core require considerable local control in their respective domains, meeting the needs of target market segments within a humanitarian or security crisis scenario.

Figure 14. Depiction of GFS Command Structure as a Professional Bureaucracy.  

---

79 Mintzberg, "Organization Design: Fashion or Fit?" 348.
The GFS as a professional bureaucracy would consist of a Task Group assigned by the Component Commander (COCOM) as a GFS Command Element. The decision making process would begin collectively from the specialist teams in the operating core, rise up to the GFS Task Group Commander, drawing on support staff where needed. The DoD, the Department of State (DOS) and the Department of Homeland Security (DHS) are part of the technostructure providing high-level training and overseeing their respective core teams.

In Phases 0 and V of a Joint campaign, restraint in military operations would be applied to gain the support of the local population. Actions resulting in adverse political consequences would be avoided to project a positive image of U.S. involvement in the host nation. Under these conditions, a predetermined set of responses to heighten trust could be systematically prepared and practiced. Through success and satisfaction with knowledge, truth, belief and retribution, foreign countries would expect and ultimately rely on a certain level of service (even perhaps a response at a certain level of violence) from the appropriate GFS team. Each team within the operating core would exercise professional autonomy in developing appropriate relationships with host nation clients, i.e., decentralization would purposefully shift considerable decision making down to the operating team level. The users and market segments serviced would be involved in determining the composition and functions of each GFS team.

Based on the functional architecture of a GFS, its primary purpose would be to portray a positive image of the U.S. Its form true to its purpose, the professional bureaucratic GFS organization would disseminate operational execution power directly to its professional experts, providing GFS teams with the requisite autonomy. Empowering the experts at its operating core reflects the importance of decision making occurring closest to the repertoire of services

---

82 United States Joint Chiefs of Staff, Joint Operations, V-3-4, 23-24.
needed. The GFS’s strategic initiatives would therefore include team input from the ground up. The GFS therefore serves its political and legal superiors while simultaneously serving the professionals in its operating core.\textsuperscript{84}

Based on stakeholder analysis, the GFS would devote time and energy collaborating primarily with its mixed blessing stakeholders, i.e., these can be swayed to support or can become non-supportive based on interactions. GFS senior executives would perform the crucial boundary spanning roles between the GFS organization and relevant outside parties and governments. As a professional bureaucracy, a GFS would accomplish this through the power of expertise. Strategic coordination of a GFS would rely on individuals and groups located in the technostructure consisting of State, Defense and Homeland Security Department agencies. Within a multinational, multi-agency campaign, GFS teams would want to be represented in administrative decisions affecting them. As a result, the GFS Commander, professional administrator would need to incorporate team representatives into the GFS planning staff. Liaison devices, task forces and standing committees would ensure mutual adjustment and coordination.\textsuperscript{85}

The GFS organization as a professional bureaucracy would result in parallel administrative hierarchies, one democratic and bottom up for the professional GFS teams and a second military bureaucracy, top down for the support staff. With the operating core or the GFS teams as the key part of the professional bureaucracy, the support staff becomes the second most elaborate part of a GFS. The support staff would consist of those involved in the transfer functions of a GFS: logistics, communications, human resources, legal, transportation, and maintenance. It is here that the Navy will play the crucial role within a GFS, ensuring the needs of the operating core are adequately met for each team to fulfill its mission.\textsuperscript{86}

\textsuperscript{84} Mintzberg, The Structuring of Organizations: A Synthesis of Research, 349-58.

\textsuperscript{85} Mintzberg, The Structuring of Organizations: A Synthesis of Research, 358-66.

\textsuperscript{86} Mintzberg, The Structuring of Organizations: A Synthesis of Research, 358-61.
There are foreseeable difficulties with a GFS organization as a professional bureaucracy. As a professional bureaucracy, a GFS will spend very little time adapting itself to new circumstances outside the capabilities and experiences of its operating core. Without proper oversight, there is no way to correct deficiencies that the GFS teams choose to overlook. Without duly trained, ethical operators, the GFS Command may find difficulty in dealing with participants who are either incompetent or unconscientious. The Command structure must step in should its operating core fail to support the purpose of the GFS: to promote a positive image of the U.S.

Change, however, should not come from above the strategic apex; superior officers should refrain from announcing reforms to control the work of the GFS teams, resulting in direct supervision and standardization of work processes or outputs. Naval GFS Commanders should not be expected to directly supervise the activities of GFS teams. Hospital administrators do not supervise operations in a surgical ward; university deans do not supervise how their professors teach classes and conduct research. As a realistic example, during the four month tour of the Navy hospital ship Comfort, doctors expressed frustration and public health experts expressed disappointment in the unfulfilled potential of the medical diplomacy initiative. While the mission succeeded as a public relations tool, it did not tailor services to the needs of each country and failed to maximize the ship's facilities rarely using sophisticated, but available medical equipment.87

Rather, GFS teams (like surgical teams and professors) have the skills to perform; primarily needing executive oversight and considerable support. Innovations would require change from the technostructure, being selective with incoming experts joining the operating core, advancing ideals and knowledge during training and indoctrination, and encouraging and rewarding the GFS

---

87 The Associated Press.
teams to upgrade their skill sets themselves. This decentralized form is meant to facilitate better interactions between host nations and GFS professionals laying the groundwork for mutual trust.88

A GFS responsive to contentious stakeholders could result in minimal efficiency and effectiveness. Governance by conflicting interests (e.g., civilian versus military) may impede continuity of mission and policy enactment. A GFS producing inconsistent, disjointed patterns of activity in response to competing demands in its political environment would result in the GFS Commander playing the role of crisis manager. With a typical two to three year military billet rotation, GFS Commanders would unlikely develop the experience and establish the reputation to become a power broker necessary to consolidate interests within the GFS and provide coherent, integrated policies to guide the GFS as a whole. The solution is again not rooted in the GFS Commander, but rather in the willingness for external stakeholders to impact the operating core or the technostructure to work together in pursuit of common means and common ends.89

B. THE JOINT SEA BASE

Based on the results section, the Joint Sea Base parameters indicated an adaptive adhocracy summarized as interacting project teams: wide horizontal job specialization based on formal training; an inherent division along service lines while deploying constituents in a joint framework; a reliance on liaison devices facilitating mutual adjustment within and between task groups; and selective decentralization in various places within the organization and involving various mixtures of managers, staff and operating experts. Overcoming a military adversary in a chaotic, violent environment may require the speed, innovation and flexibility only found in a more fluid (vice standardized) structure where power, coordination and control are by mutual adjustment of competent experts.

89 Roberts, 224-5.
This depiction of a future, truly joint sea base transcends the traditional defense machine bureaucracy lionized with sharp divisions of labor, extensive unit differentiation, highly formalized, standardized behaviors and emphasis on planning and control systems.\textsuperscript{90}

Figure 15. Depiction of a JSB Command Structure as an Adhocracy.\textsuperscript{91}

A JSB as an adhocracy would consist of varying clusters of operational commanders and support staff. The participants within a Joint Warfare Command would be the preliminary building blocks for a JSB.\textsuperscript{92} A JSB may be within a JTF established along a functional basis with the specific objective of sea basing with directive authority for common support capabilities over specific logistic forces, facilities and supplies. Based on the mission, operational environment, and available capabilities and support, the JSB would initially be the JTF headquarters (HQ). As a preponderance of Army and Air Force units develops in the joint operations areas (JOAs) and the Joint Forces Commander (JFC) or CJTF shifts to the CINC, the JTF HQ may shift ashore but continue to rely on the JSB for its support. The JSB Commander (CJSB) may play the role

\begin{itemize}
\item \textsuperscript{90} Mintzberg, The Structuring of Organizations: A Synthesis of Research, 432-3.
\item \textsuperscript{91} Modified diagram after Mintzberg, The Structuring of Organizations: A Synthesis of Research, 443.
\item \textsuperscript{92} Richard Brown, 6.
\end{itemize}
of the JFC or the JFMCC (Joint Forces Maritime Component Commander). Or, the CJSB would receive orders from the JFC and work with the JFMCC within a joint force structure.  

The JSB command would consist of military experts trained specifically for the sea basing scenario. Specialists from all the services would tailor any responses through mutual adjustment within and between multidisciplinary teams or tasks forces around a specific campaign. Those traditionally relegated to the support staff, responsible for transfer functions as stated before, would play key roles in interdependent relationships. Larger, more integrated projects and a more focused sphere of operations mean the efforts of various specialists would often be interdependent. The JSB command would be a system of work constellations, each located at the level of the hierarchy commensurate with the level of functional decision-making needed.

Decision making would flow to anyone in the organization based more on their formal skills and situational expertise rather than rank alone. Each JSB would draw on line managers and staff specialists as necessary, distributing power to them and causing them to work together as experts. Commanders within a JSB would become functioning members of the project teams, with special responsibility to effect coordination between them. Strategy formulation in the JSB would not be clearly placed, but formed implicitly by joint experimentation and a spiral development process. Since the JSB adhocracy’s main purpose is to innovate, the results of its efforts would not be readily predetermined nor its strategy specified in advance.

The danger of an adhocracy within a military organization is a lack of unity of command. With the power diffused throughout the organization, a JSB runs the risk of too little formalization of behavior. To resolve this issue, JSB would

---

93 United States Joint Chiefs of Staff, Joint Task Force Headquarters, I-3.
95 National Research Council, 66.
become an administrative adhocracy with a sharp distinction apart from its operating core, the subordinate task groups performing CJSB. This truncation would allow the existing chains of commands to continue above and below the JSB while allowing the JSB to concentrate on overcoming the boundaries of the military bureaucracy. The JSB command would manage the subordinate commands in the prepositioning forces for interoperability, complementary capabilities and maximum overall efficiency, affordability, and warfighting synergy.

The JSB Commander would mostly be occupied with internal battles over strategic choices, budgets and handling the disturbances that arise due to the fluid nature of the command structure. They would devote considerable time personally monitoring projects, ensuring completion according to schedule, and within projected budget estimates. More importantly, the JSB Commander would serve as the liaison or negotiator with external stakeholders, specifically JSB’s principal user stakeholder, COCOM.

The greatest danger of a JSB adhocracy comes from the military orthodox culture. As noted in the people, feasibility and flexibility test, the lower would be those who cannot accept such an unorthodox, organic structure embedding itself within the military. JSB command personnel would need a high tolerance for ambiguity and a low tolerance for obscure authority relationships. Coupled with the competitiveness and the politicization inherent in an adhocracy, conflicts would inevitably occur. A skillful JSB Commander would do what commanders have always done - channel the participants’ aggressiveness towards productive ends beneficial to the JSB rather than individual goals.

---

98 National Research Council, 65.
100 Mintzberg, The Structuring of Organizations: A Synthesis of Research, 460-5.
By focusing on effectiveness, the adaptive JSB would sacrifice efficiency and responsiveness, discarding rigid adherence to internal order and control.\textsuperscript{101} The root of its inefficiency would be the high cost of coordination. Time would be required so that dispersed experts would participate in decision making. Inefficiency may also result from unbalanced workload. Due to the unpredictability of each scenario, some players may not be involved while others are overwhelmed with excess responsibilities.\textsuperscript{102} Alternatively, a future Sea Basing Planning Office may decide to bureaucratize the JSB. Sea basing may cause a transformation of DoD force structure, logistics, training and supporting infrastructure as the ideas the adhocracy generates becomes more tested and validated. However, efforts to standardize the organizational structure and to maximize overall efficiency should be delegated to the truncated operating core and not extend into the JSB.\textsuperscript{103} Perhaps in the future, after many trials and tribulations, JSB Commanders would have the experience to establish doctrine and standards essential for balancing the efficiency and effectiveness of sea basing. So long as there is a need for effective, adaptive and innovative solutions to overcome obstacles within the military bureaucracy and against unprecedented adversaries in unpredictable scenarios, the JSB would do well to consider the adhocracy configuration.

\textsuperscript{101} Roberts, 226.
\textsuperscript{102} Mintzberg, The Structuring of Organizations: A Synthesis of Research, 463-5.
\textsuperscript{103} National Research Council, 46.
V. CONCLUSIONS

A. INTERPRETATION OF RESULTS

Table 11. A Summary of the Results.

<table>
<thead>
<tr>
<th>Stakeholder Analysis</th>
<th>GLOBAL FLEET STATION</th>
<th>JOINT SEA BASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greatest Impact: Users and Adversaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary Type: Mixed Blessing Collaborative Strategy</td>
<td></td>
<td>Primary Type: Non-supportive Reduce Strategy</td>
</tr>
<tr>
<td>Functional Analysis</td>
<td>Show a Positive Image of the U.S.</td>
<td>Project U.S. Power</td>
</tr>
<tr>
<td>Transfer Functions: Coordinate, Assembly, Close, Sustain, Reconstitute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structural Configuration</td>
<td>Professional Bureaucracy</td>
<td>Administrative Adhocracy</td>
</tr>
<tr>
<td>Organizational Configuration</td>
<td>Responsive</td>
<td>Adaptive</td>
</tr>
</tbody>
</table>

This thesis concludes that the GFS may be optimally served if structured more as a responsive professional bureaucracy, and the JSB as an adaptive, administrative adhocracy. Relative fit with these configurations was established starting with a comprehensive systems engineering analysis. The needs analysis defined the problems, needs and relevancies of a system consisting of a GFS and JSB. The stakeholder analyses described over 100 stakeholders in terms of their potential impact during the operational and support phase of the GFS/JSB life cycle. GFS and JSB Commanders would be formulating and implementing collaborative strategies with various mixed blessing stakeholders and defensive strategies against adversarial stakeholders. The functional architecture showed the primary function of the GFS to be marketing a positive U.S. image, while that of the JSB to be projecting U.S. power. Both entities would need to perform transfer functions, such as coordinating, assembling, closing, sustaining and reconstituting. The proposed organizational structures
were further evaluated through design parameters, contingency factors, and organizational characteristics. The proposed structural configurations were further elaborated through fit and design tests within an practical, step-wise organizational framework. The organizational framework pulled in various parts of the systems engineering analysis and the qualitative evaluations to more fully describe the market advantage, parenting advantage, people, feasibility, specialist culture, difficult links, redundant hierarchy, accountability and flexibility of the GFS/JSB. These tests ensured that this thesis addressed the critical aspects of the proposed GFS/JSB structures for a well-designed fit.

The characteristics of a GFS best fit those of a responsive\textsuperscript{104} professional bureaucracy. Since its primary purpose is to show a positive image, the GFS would be in essence a marketing entity with competing coalitions and stakeholder conflicts. Its organizational coordination would only be successful through the interplay of politics and coalitions addressing the lack of coherence among its parts. The central skills of its commanders would be to manage crises and form partnerships.

The characteristics of a JSB best fit those of an adaptive\textsuperscript{105} administrative adhocracy. The JSB would innovate within its complex environment. Through task forces and mutual adjustments, the JSB would find new opportunities to forward the joint sea basing strategic vision. This requires teamwork, creativity and flexibility. The CJSB would inspire his subordinates to action and build enthusiasm and commitment to overcome inherent conflicts both internal and external to the U.S. military.

A previous study\textsuperscript{106} proposed how a Navy-Marine Task Force operating in a littoral region would transition to a JTF. As stated in the background section, a GFS lacks jointness and currently has a purely maritime focus. With the proper

\textsuperscript{104} Roberts, 221-3.
\textsuperscript{105} Roberts, 221-3.
\textsuperscript{106} Richard A. Brown.
motivation, it is possible to incorporate the Army and Air Force into littoral Phase 0 and V operations amongst the myriad of professional operators within a GFS. However, this thesis posits that such a transition does not apply due to the considerable differences between the GFS and JSB command structures. The Army and Air Force were listed in the stakeholder analysis as non-supportive stakeholders with reduced impact since they have their own solutions (i.e., the Global Strike Task Force\textsuperscript{107}) to the A2AD problem. A GFS Commander would only be at the Task Group level, while a CJSB is proposed to be one level below the CJTF, if not the CJTF itself. Incorporating non-supportive stakeholders within the operating core would significantly increase their impact on the GFS domain creating a more complex and difficult political balancing act for lower ranking Commanders. In addition, the decision making process within a GFS begins with the specialist teams in the operating core. In a JSB, the operating core is truncated and outsourced to subordinate commands.

As stated in the background section, the U.S. military could devise consistent solutions for all the services to perform the same transfer functions for both Naval and Joint systems. However, it remains to be seen whether the same assets used in a GFS could also be used in a JSB, since a GFS is primarily a Naval system while a JSB is a Joint system. Far more likely would be a case where a GFS is incorporated underneath a JSB. With a GFS as a JSB subordinate command, a JSB would ideally have interchangeable assets at its disposal. A higher ranking CJSB could then transcend the self-interest within each of the services to utilize GFS assets within a wider Joint theater, political obstacles a lower ranking GFS Commander may be unable to overcome.

B. BENEFITS OF STUDY

This study used the following methodology. The results of a needs analysis, stakeholder analysis and functional analysis were compared with the design parameters and contingency factors of five different structural

\textsuperscript{107} Wonzie Gardner and Eric R. Nelson.
configurations and the organizational characteristics of four different organizational characteristics. The comparison process selected specific structures for the GFS and the JSB. Each organization was further evaluated through fit and design tests within a practical, step-wise framework.\textsuperscript{108}

Proposing defense entities in terms of various organizational structures was done to assist military leaders trying to adapt and transform their traditional structures into more innovative ones. Matching an array of organizational configuration variables to emerging GFS and JSB designs was done to encourage creative thinking around possible structural changes to fit emerging sea basing requirements. Managers and practitioners may benefit in terms of greater understanding of the following: 1) the interrelationship between organizational strategy and structure; 2) the complexity surrounding adapting traditional machine bureaucracy structures into more responsive, adaptive and interdependent project teams; and 3) the importance of describing and prioritizing stakeholders, including formulating and implementing stakeholder strategies.

This thesis described different types of organizational command and operating structures designed to optimize potential performance of GFS and JSB strategies. The premise is that alternative organizational structures may better fit the overall situational and contextual factors encountered in emerging GFS or JSB scenarios. Using adhocractic structures known for generating innovation among interacting project teams can serve as a basis for force planning and doctrine formulation.

Ship design could accommodate the structural configurations of each organization similar to how civilian technology companies continue to experiment with workplace design to promote flexible work styles.\textsuperscript{109} Common work environments and drop-in spaces accommodating mobile operators and facilitating contact and collaboration could boost productivity for both civilian and

\textsuperscript{108} Langford, “Stakeholder Analysis,” 2-3.
\textsuperscript{109} Don Clark.
military workers. Privacy areas and quiet zones would allow for concentration and confidentiality. A GFS would require a large, modular facility or a group of facilities to house the various and changing expeditionary teams in the operating core. Some, such as Foreign Affairs Officers (FAO) and diplomats would require personnel accommodations tailored to respect and facilitate political, social and religious differences. Others – Navy SEALs and the Coast Guard – would likely require their own transport vessels. Coordination efforts materializing in communication networks with varying levels of security protocols and access would be necessary throughout the GFS. Spaces would be designed as specifically conducive for liaison activities. Meanwhile, a JSB could be situated on a single command ship dedicated for joint coordination. Ship design for the JSB would emphasize a single command ship, preferably dedicated for joint coordination, given the size of the command and the outsourcing of its operations. The fluidity of the JSB adhocracy would need to be taken into account when designing the command center to allow all dispersed experts to participate in the decision making process without compromising on efficiency. Designers of the JSB command center would need to allow maximum command and control with its subordinate units, most likely not represented on the JSB command ship due to the service oriented structure of the current military.

Alternative organizational structures still require human resource managers to match appropriate personnel with like billets. Other professional bureaucracies – hospitals and universities – have demonstrated the utility and clarity of highly skilled professionals making situational requirement decisions, similar to GFS responsive requirements. GFS Commanders can replicate the private practice of brand marketing combined with naval diplomacy to fulfill the primary GFS function of portraying a positive and strong U.S. image. They would speak in terms of collaborative and defensive strategies around important stakeholders, while JSB Commanders would seek to project power and maximizing effectiveness possibly at the expense of favorable images.
C. AREAS FOR FURTHER STUDY

This thesis used a synthesis of established academic and practical techniques, which future researchers and business executives could use for determining organizational configurations designed to fit varying environmental contexts. Project managers could use the system engineering analyses to gain insight across project life cycles. While the methodology focused primarily on operations and support aspects, project managers may benefit from analyzing their respective stakeholders through the full project life cycle, including formulating applicable influence strategies, and identifying third and fourth order stakeholders.

Clearly acknowledged is the subjective interpretation of various characteristics, such as the potential for a stakeholder to be supportive or non-supportive, or even different interpretations of concepts such as impact, relevancy, and user. Care was taken to accurately follow established literature on the GFS and on sea basing. Definitions were stated in the glossary. Interpretations were itemized in the results section to clarify and simplify the words and the logic used. A diverse set of analyses were performed based on multiple sources with different perspectives from management scholars over three decades. The proposed organizational structures for the GFS and JSB are theoretical constructs based on researched configurations.

The thesis included qualitative analyses of organizational design, however it was beyond the scope of the study to quantitatively test and evaluate the responsiveness of a GFS organized as a professional bureaucracy or the effectiveness and adaptability of a JSB adhocracy. Computer simulations based on behavioral assumptions could generate sufficient metrics to test and evaluate which configuration best fit which organization. Seminar or role playing war-

---

110 Gary Langford, “Gap Analysis.”
games\textsuperscript{111} could allow players to act out specific scenarios within the context of different organizational structures. Players' responses could be adjudicated to determine which arrangements appeared to work best.

\textsuperscript{111} Peter P. Perla.
LIST OF REFERENCES


INITIAL DISTRIBUTION LIST

1. Defense Technical Information Center
   Ft. Belvoir, Virginia

2. Dudley Knox Library
   Naval Postgraduate School
   Monterey, California