



Calhoun: The NPS Institutional Archive
DSpace Repository

Reports and Technical Reports

Faculty and Researchers' Publications

2009-12-01

Acquisition in USTRANSCOM: An Organizational Assessment

Sykes, John; Ross, Shane; Frederick, Josh

<https://hdl.handle.net/10945/33447>

This publication is a work of the U.S. Government as defined in Title 17, United States Code, Section 101. Copyright protection is not available for this work in the United States.

Downloaded from NPS Archive: Calhoun



Calhoun is the Naval Postgraduate School's public access digital repository for research materials and institutional publications created by the NPS community. Calhoun is named for Professor of Mathematics Guy K. Calhoun, NPS's first appointed -- and published -- scholarly author.

Dudley Knox Library / Naval Postgraduate School
411 Dyer Road / 1 University Circle
Monterey, California USA 93943

<http://www.nps.edu/library>

NPS-AM-09-115



ACQUISITION RESEARCH SPONSORED REPORT SERIES

Acquisition in USTRANSCOM: An Organizational Assessment

10 November 2009

by

**Capt. John S. Sykes, USAF,
Capt. Shane M. Ross, USAF, and
Capt. Joshua S. Frederik, USAF**

Advisors: Dr. Rene G. Rendon, Associate Professor, and
Cary Simon, Lecturer

Graduate School of Business & Public Policy

Naval Postgraduate School

Approved for public release, distribution is unlimited.

Prepared for: Naval Postgraduate School, Monterey, California 93943



ACQUISITION RESEARCH PROGRAM
GRADUATE SCHOOL OF BUSINESS & PUBLIC POLICY
NAVAL POSTGRADUATE SCHOOL

The research presented in this report was supported by the Acquisition Chair of the Graduate School of Business & Public Policy at the Naval Postgraduate School.

To request Defense Acquisition Research or to become a research sponsor, please contact:

NPS Acquisition Research Program
Attn: James B. Greene, RADM, USN, (Ret)
Acquisition Chair
Graduate School of Business and Public Policy
Naval Postgraduate School
555 Dyer Road, Room 332
Monterey, CA 93943-5103
Tel: (831) 656-2092
Fax: (831) 656-2253
e-mail: jbgreene@nps.edu

Copies of the Acquisition Sponsored Research Reports may be printed from our website www.acquisitionresearch.org



ACQUISITION RESEARCH PROGRAM
GRADUATE SCHOOL OF BUSINESS & PUBLIC POLICY
NAVAL POSTGRADUATE SCHOOL

NPS-AM-09-



NAVAL
POSTGRADUATE
SCHOOL

MONTEREY, CALIFORNIA

Acquisition in USTRANSCOM: An Organizational Assessment

10 November 2009

by

**Capt. John S. Sykes, USAF,
Capt. Shane M. Ross, USAF, and
Capt. Joshua S. Frederik, USAF**

Advisors: Dr. Rene G. Rendon, Associate Professor, and
Cary Simon, Lecturer

Graduate School of Business & Public Policy

Naval Postgraduate School

Approved for public release, distribution is unlimited.

Prepared for: Naval Postgraduate School, Monterey, California 93943

THIS PAGE INTENTIONALLY LEFT BLANK

Abstract

This research analyzed United States Transportation Command Acquisition (TCAQ) using the *GAO Framework for Assessing the Acquisition Function at Federal Agencies*. In 2008, the USTRANSCOM applied for and received head-of-agency authority to manage its acquisition programs, resulting in TCAQ restructuring to include the program management function. The objective of this research was to compare organizational structure, processes and critical success factors using the *GAO Framework* to derive a web-based survey, including conducting semi-structured interviews with TCAQ professionals and stakeholders. As a result of our research, we recommend the following suggestions to TCAQ: continue the use of cross-functional teams to maintain the collaborative environment within the organization; continue the use of “Director’s Calls,” and evaluate the efficacy of current performance metrics; consider establishing an intern program to train entry-level project managers; and encourage and fund graduate education for applicable employees.

Keywords: USTRANSCOM Acquisition, USTRANSCOM Organizational Assessment



THIS PAGE INTENTIONALLY LEFT BLANK



ACQUISITION RESEARCH PROGRAM
GRADUATE SCHOOL OF BUSINESS & PUBLIC POLICY
NAVAL POSTGRADUATE SCHOOL

Acknowledgments

We would like to thank our advisors, Dr. Rene Rendon and Dr. Cary Simon, for their guidance and support throughout this research. Their insight and direction were truly appreciated.

We sincerely would like to thank Ms. Gail Jorgenson, Mr. Scott McLeod, and the members of the USTRANSCOM TCAQ for their participation in the survey. They were instrumental in aiding us to complete our research.

We owe a special thanks to Ms. Donna Cuadrez for her technical writing support. Her expertise was invaluable during the final stages of the thesis processing process. With much love and special thanks to each of our families, Ms. Leigh Wallace and Mrs. Kristin Frederik, for their patience and the many sacrifices each of them endured during this research for the last year.

John Sykes would like to recognize his wife, Roberta, for her understanding and support during this long 18-month Master's program. We may have been geographically separated, but you were always on my mind and in my heart. I love you.



THIS PAGE INTENTIONALLY LEFT BLANK



About the Authors

Captain Shane M. Ross, United States Air Force, is currently enrolled in the Master of Business Administration program (with an emphasis on Systems Acquisition Management) at the Naval Postgraduate School, Monterey, California. Capt Ross completed his undergraduate studies at the University of Northern Colorado at Greeley, Colorado. Prior to being selected for graduate studies, Capt Ross served as an Air Force Program Manager for the Space and Missile System Center's Space Development and Test Wing, Kirtland AFB, New Mexico, from 2003 until 2006. From 2006 until 2008, Capt Ross served as a Test and Target's program manager for the Missile Defense Agency's Airborne Laser Program, also located at Kirtland AFB.

Captain John S. Sykes, United States Air Force, is currently enrolled in the Master of Business Administration program (System Acquisition Management) at the Naval Postgraduate School, Monterey, California. Capt Sykes completed his undergraduate studies at Mississippi State University, Starkville, Mississippi in 2002. Prior to being selected for graduate studies, Capt Sykes served as an Air Force Program Manager for the \$3.2 billion C-130 Center Wing Replacement program, in addition to being the Air Force liaison for the Joint Cargo Aircraft program while assigned to the C-130 System Program Office, 330th Aircraft Sustainment Group, Robins AFB, Georgia, from 2004 until 2008.

Captain Joshua S. Frederik, United States Air Force, is currently enrolled in the Master of Business Administration program (with an emphasis on Systems Acquisition Management) at the Naval Postgraduate School, Monterey, California. Capt Frederik completed his undergraduate studies at Norwich University, Northfield, Vermont. Prior to being selected for graduate studies, Capt Frederik served as an Air Force Test Project Manager on aeropropulsion and aircraft system projects for the 716th & 717th Test Squadrons, 704th Test Group, Arnold AFB, Tennessee, from 2004 until 2008.



THIS PAGE INTENTIONALLY LEFT BLANK



NPS-__-09-115



ACQUISITION RESEARCH SPONSORED REPORT SERIES

Acquisition in USTRANSCOM: An Organizational Assessment

10 November 2009

by

**Capt. John S. Sykes, USAF,
Capt. Shane M. Ross, USAF, and
Capt. Joshua S. Frederik, USAF**

Advisors: Dr. Rene G. Rendon, Associate Professor, and
Cary Simon, Lecturer

Graduate School of Business & Public Policy

Naval Postgraduate School

Disclaimer: The views represented in this report are those of the author and do not reflect the official policy position of the Navy, the Department of Defense, or the Federal Government.



THIS PAGE INTENTIONALLY LEFT BLANK



ACQUISITION RESEARCH PROGRAM
GRADUATE SCHOOL OF BUSINESS & PUBLIC POLICY
NAVAL POSTGRADUATE SCHOOL

Table of Contents

Abstract	i
Acknowledgments	iii
About the Authors	v
Table of Contents	ix
LIST OF ACRONYMS AND ABBREVIATIONS	xi
Executive Summary	xv
I. Acquisition in USTRANSCOM	1
A. Introduction.....	1
B. Environment	1
C. Research Objective	2
D. Benefits of Research	3
E. Limitations and Assumptions	3
F. Methodology.....	3
G. Organization of Research.....	5
H. Summary	6
II. Literature Review	7
A. Introduction.....	7
B. Defense Acquisition Environment.....	7
C. Defense Acquisition System.....	8
D. Statutory Requirements.....	12
E. Current State of the Defense Acquisition System.....	15
F. Benefits and Samples of Organizational Assessment Tools	25
G. <i>GAO Framework for Assessing the Acquisition Function at Federal Agencies</i>	35
H. Summary	42
III. USTRANSCOM	43
A. Introduction.....	43
B. USTRANSCOM	43
C. Components of the USTRANSCOM.....	46
D. Acquisition Authority	52



E.	USTRANSCOM’s Command Acquisition.....	54
F.	Summary	58
IV.	Analysis of Research	60
A.	Overview	60
B.	Setup, Demographics, and Analysis Methodology	62
C.	Cornerstone 1 Results.....	63
D.	Cornerstone 2 Results.....	69
E.	Analysis of Results	80
F.	Recommendations.....	86
G.	Summary	87
V.	Summary, Research Questions and Goals, Conclusion, and Recommendations for Further Research.....	88
A.	Introduction.....	88
B.	Summary	88
C.	Research Questions and Goals.....	89
D.	Conclusions.....	90
E.	Recommendations for Further Research.....	93
APPENDIX A.	Delegation Letter	94
A.	Head-of-agency Delegation Letter.....	94
APPENDIX B.	Survey and Results	95
APPENDIX C.	USTRANSCOM TCAQ Survey	96
APPENDIX D.	GAO Assessment Framework Indicators for “Effectively Managing the Acquisition Process”	109
LIST OF REFERENCES	122
2003 - 2009 Sponsored Research Topics	126



LIST OF ACRONYMS AND ABBREVIATIONS

ACAT	Acquisition Category
AIS	Automated Information Systems
AMC	Air Mobility Command
AMSDDC	Army Military Surface Deployment and Distribution Command
ASRP	Acquisition Strategy Review Panel
BENS	Business Executives for National Security
<i>CICA</i>	<i>Competition in Contracting Act</i>
CIO	Chief Information Officer
CMF	CMMI Model Foundation
CMMI	Capability Maturity Model Integration
COTS	Commercial off-the-shelf
CRAF	Civil Reserve Air Fleet
DAPA	Defense Acquisition Performance Assessment
DAR	Defense Acquisition
DAS	Defense Acquisition System
DAU	Defense Acquisition University
<i>DAWIA</i>	<i>Defense Acquisition Workforce Improvement Act</i>
<i>DFARS</i>	<i>Defense Federal Acquisition Regulation Supplement</i>
DTS	Defense Transportation System
DoD	Department of Defense



DPO	DoD Distribution Process Owner
EVM	Earned Value Management
EMTF	Expeditionary Mobility Task Force
FACNET	Federal Acquisition Computer Network
<i>FAR</i>	<i>Federal Acquisition Regulation</i>
<i>FASA</i>	<i>Federal Acquisition Streamlining Act</i>
FFRDC	Federally Funded Research and Development Center
GAO	General Accountability Office
IT	Information Technology
IPR	In-process Review
JDA	Joint Deployment Agency
JRMB	Joint Requirements and Management Board
MDAP	Major Defense Acquisition Programs
MDA	Milestone Decision Authority
MSTS	Military Sea Transportation Service
MSC	Military Sealift Command
MTMTS	Military Traffic Management and Terminal Service
<i>NSDD</i>	<i>National Security Decision Directive</i>
NPS	Naval Postgraduate School
OMB	Office of Management and Budget
OPM3	Organizational Project Management Maturity Model
PM	Program Manager
PMBOK	Project Management Body of Knowledge



PMI	Project Management Institute
PMMM	Project Management Maturity Model
RDT&E	Research Development Test & Evaluation
SEI	Software Engineering Institute
TCAQ	Transportation Command Acquisition Organization
<i>TINA</i>	<i>Truth in Negotiating Act</i>
USTRANSCOM	United States Transportation Command
VISA	Voluntary Intermodal Sealift Agreement



THIS PAGE INTENTIONALLY LEFT BLANK



ACQUISITION RESEARCH PROGRAM
GRADUATE SCHOOL OF BUSINESS & PUBLIC POLICY
NAVAL POSTGRADUATE SCHOOL

Executive Summary

This research examined the United States Transportation Command Acquisition (TCAQ) using the *GAO Framework for Assessing the Acquisition Function at Federal Agencies*. In 2008, the USTRANSCOM applied for and received head-of-agency authority to manage its acquisition programs, resulting in TCAQ restructuring to include the program management function.

Analysis and conclusions were based on researcher developed, web-based, anonymous surveys and semi-structured interviews with TCAQ personnel. Survey statements were derived from the *GAO Framework* to conduct this qualitative assessment of TCAQ's acquisition function and critical success factors, i.e., components believed to be necessary for the system to be successful. It is then the "fit" of these components, among an array of external environmental and internal design factors, that ultimately determines performance.

A positive finding was that TCAQ leadership was perceived to communicate effectively, including having a positive attitude towards the workforce during restructuring. However, the roles and responsibilities of stakeholders in the acquisition process were not perceived to be well defined. Additionally, we found that TCAQ leadership was perceived to hold stakeholders accountable for their actions and used cross-functional teams, which teams used project plans. There appeared to be insufficient metrics related to acquisition efficiency; therefore, metrics results may be insufficiently briefed to leadership. TCAQ may lack mechanisms for anticipating, identifying and reacting to risks.

We recommend continuing the use of cross-functional teams to maintain the collaborative environment within the organization. We also recommend continuing the use of "Director's Calls" and evaluating the efficacy of current performance metrics. Finally, we recommend establishing an intern program to train entry-level



project managers and encouraging and funding graduate education for applicable employees.



ACQUISITION RESEARCH PROGRAM
GRADUATE SCHOOL OF BUSINESS & PUBLIC POLICY
NAVAL POSTGRADUATE SCHOOL

I. Acquisition in USTRANSCOM

A. Introduction

The first chapter of this report introduces the research by providing background for studying United States Transportation Command's (USTRANSCOM) Acquisition Organization. Furthermore, this chapter will explain the potential benefits and limitations of this research. Finally, we will discuss the methodology for conducting this research and give a brief overview of the subsequent chapters.

B. Environment

The current perception of the Department of Defense's (DoD) acquisition structure and processes is that it needs to be "reexamined and in great detail"—this according to a memo dated June 7, 2005, from Gordon England, acting Deputy Secretary of Defense (2005, p. 1). The memo was in response to an outcry from Congress over its concern about the DoD acquisition process (England, 2005). In addition to acting Deputy Secretary of Defense England's comments, the United States General Accountability Office (GAO) released a report that assessed the performance of 54 major weapons acquisition programs and found that 26 of them experienced a cost growth of almost 15%, along with a 19% increase in schedule over the original estimates (GAO, 2005a, p. 1). To further illustrate this concern, in 2005, Senator John Warner, Senate Armed Services Committee chairman, said that he was worried that the Pentagon's process for buying weapons and complex systems may be broken. Senator Warner went on to say, "The time has long come for a top-to-bottom review of the department's acquisition organization, its acquisition work force and its acquisition process" (Warner, 2005, p. 1).

This research project is an analysis of the USTRANSCOM's Command Acquisition organization (TCAQ). In 2008, the USTRANSCOM received acquisition authority to manage its own Services and Information Technology (IT) acquisition programs. The research focus is on TCAQ's alignment of acquisition with the



organization's mission and needs, as well as how the recent reorganization of TCAQ affected program management processes. The tool used for assessing the research focus is the *GAO Framework for Assessing the Acquisition Function at Federal Agencies*. Within the *Framework*, the research utilized recommended questions in the creation of an internet-based survey applied to TCAQ personnel. Semi-structured interviews were also conducted at the USTRANSCOM's Headquarters, Scott Air Force Base, Illinois. The results were then analyzed to measure the level of consistency or inconsistency with that of the *GAO Framework's* critical success factors. The *GAO Framework* will be discussed in depth in Chapter II. The research objective will be discussed in the following section.

C. Research Objective

The objective of this report is to analyze TCAQ's current organizational structure and processes using the *GAO Framework for Assessing the Acquisition Function at Federal Agencies*. This analysis will provide TCAQ with useful, objective analysis of its organization, in addition to recommendations for future research.

The two primary goals of the research are as follows:

- To provide TCAQ with an assessment of its organizational structure
- To review and analyze TCAQ's program management processes

The research questions for this project are as follows:

- How does TCAQ align acquisition with the organization's mission and needs?
- How has TCAQ's recent reorganization affected program management processes?

These research questions address requested areas of study by TCAQ leadership. The next section will discuss the potential benefits and limitations of this research.



D. Benefits of Research

By assessing TCAQ's current organizational structure and processes, and by identifying consistencies and inconsistencies with the *GAO Framework's* critical success factors, the analysis will provide an external, objective view of the current state of the TCAQ organization. TCAQ can apply the recommendations based on the analysis of findings as well as explore the recommended areas for further research to make improvements to its organizational structure and processes.

E. Limitations and Assumptions

This research will be limited to the use of only one organizational assessment tool: the *GAO Framework for Assessing the Acquisition Function at Federal Agencies*. In addition, the research will utilize questions from the first two cornerstones of the *GAO Framework* in creating the survey that will be applied to the TCAQ workforce. The cornerstones of the *GAO Framework* that will be utilized are Organizational Alignment and Leadership and Policies and Processes. Furthermore, this is not a quantitative research study that focuses on statistical significance, but rather a qualitative exploratory study. In addition, the data obtained from the survey is limited to only the number of survey respondents. Finally, the *GAO Framework* has never been utilized at TCAQ for this type of analysis; therefore, there are no historical data with which to compare our results.

The major assumption of this research is that collected data is an actual reflection of TCAQ's current state with regard to organizational structure and program management processes. The next section of this chapter will explain the methodology of this research.

F. Methodology

The methodology of this research was designed to determine and analyze TCAQ's acquisition functions from the perspectives of organizational structure and program management processes. A sample of references found in the literary review



chapter of this research include studies and reports from the GAO, documentation provided by the USTRANSCOM, and multiple Defense Acquisition University (DAU) guidance documents. This research includes TCAQ workforce survey results that provide insight related to the alignment of acquisition with the organization's mission and needs, as well as how the recent reorganization of TCAQ affected program management processes. The research project team created an internet survey based on recommended questions from the first two cornerstones in the *GAO Framework*. Data collected from the surveys was analyzed to show consistencies and inconsistencies with the *GAO Framework's* critical success factors.

The *GAO Framework* was developed to facilitate high-level, qualitative assessments of the strengths and weaknesses of the acquisition function at federal agencies (GAO, 2005b, p.vii). The *GAO Framework* consists of four interrelated cornerstones: (1) Organizational Alignment and Leadership, (2) Policies and Processes, (3) Human Capital, and (4) Knowledge and Information Management. This research utilizes only Cornerstones 1 and 2. The *GAO Framework* is designed as an integrated evaluation approach, but each of the cornerstones can stand alone so that *Framework* users can tailor evaluations to an agency's specific needs.

1. Cornerstone 1: Organizational Alignment and Leadership

Organizational alignment is the appropriate placement of the acquisition function in the agency, with stakeholders having clearly defined roles and responsibilities. There is no single, optimal way to organize an agency's acquisition function. Each agency must assess whether the current placement of its acquisition function is meeting its organizational needs. Committed leadership enables strategic decisions that achieve optimal, agency-wide acquisition outcomes (GAO, 2005b, p. vii).



2. Cornerstone 2: Policies and Processes

Implementing strategic decisions to achieve agency-wide outcomes requires clear and transparent policies that are implemented consistently. Policies establish expectations about the management of the acquisition function. Processes are the means by which the management functions will be performed and implemented in support of agency missions. Effective policies and processes govern the planning, awarding, administration and oversight of acquisition efforts with a focus on assuring these efforts achieve intended results (GAO, 2005b p.viii).

G. Organization of Research

This report is organized into five chapters designed to provide a clear view of the research approach and results.

Chapter I provides an introduction, background, objectives and limitations, and a methodology overview that touches on Cornerstones 1 and 2 of the *GAO Framework for Assessing the Acquisition Function at Federal Agencies*.

Chapter II is a literature review encompassing key documents and references utilized in the research. Chapter II examines the current DoD acquisition environment, the Defense Acquisition System (DAS), and the relevant acquisition statutes and directives. Furthermore, Chapter II reviews a sample of organizational assessment tools along with the benefits of using such tools. Finally, the *GAO Framework* will be explored deeper, and we will discuss how it is specifically applied to the analysis of the TCAQ organization.

Chapter III provides a detailed view of the USTRANSCOM, including its organizational structure, changes, acquisition history, current acquisition programs, etc. The premise of Chapter III is to provide the reader with a clear view of the USTRANSCOM's organizational makeup, mission, and acquisition functions.



Chapter IV discusses the findings of the survey applied to TCAQ. This chapter also analyzes those findings as well as offer recommendations based on the analysis.

Chapter V provides a summary of the research, research questions and goals, conclusion to the research, and recommendations for further research.

H. Summary

The goal of Chapter I was to provide the reader with sufficient information to understand the background and objective of this research. In addition, this chapter highlighted the potential benefits and limitations of this research. Moreover, Chapter I explained the methodology as well as the organization of this research. Next, Chapter II will provide a literature review investigating the DoD's acquisition environment, system, and policies. The benefits of utilizing organizational assessments, along with a sample of organizational assessment tools, will also be explored. Finally, the *GAO Framework* will be discussed in depth as the specific tool used for this research.



II. Literature Review

A. Introduction

The literature review is presented in six sections. The first discusses the Defense Acquisition Environment. The second section transitions into the Defense Acquisition System as a whole. The third section focuses on the relevant statutory regulations pertaining to DoD acquisition. The fourth section describes the current state of DoD acquisition through an examination of recent reports that outline major problems and negative focus areas. The fifth section highlights the potential benefits of utilizing an organizational assessment as well as outlines a sample of assessment tools. The final section describes the *GAO Framework for Assessing the Acquisition Function at Federal Agencies* (GAO, 2005b). This *GAO Framework* is the specific tool used in this research to analyze TCAQ's organizational structure and processes.

B. Defense Acquisition Environment

The current Defense Acquisition Environment consists of a triad between Congress, the executive branch, and industry. The DoD Program Manager (PM) fits directly in the middle of this triad and is constantly receiving and delivering information to the entities mentioned above. Figure 1 depicts this environment and the relationships between all parties.



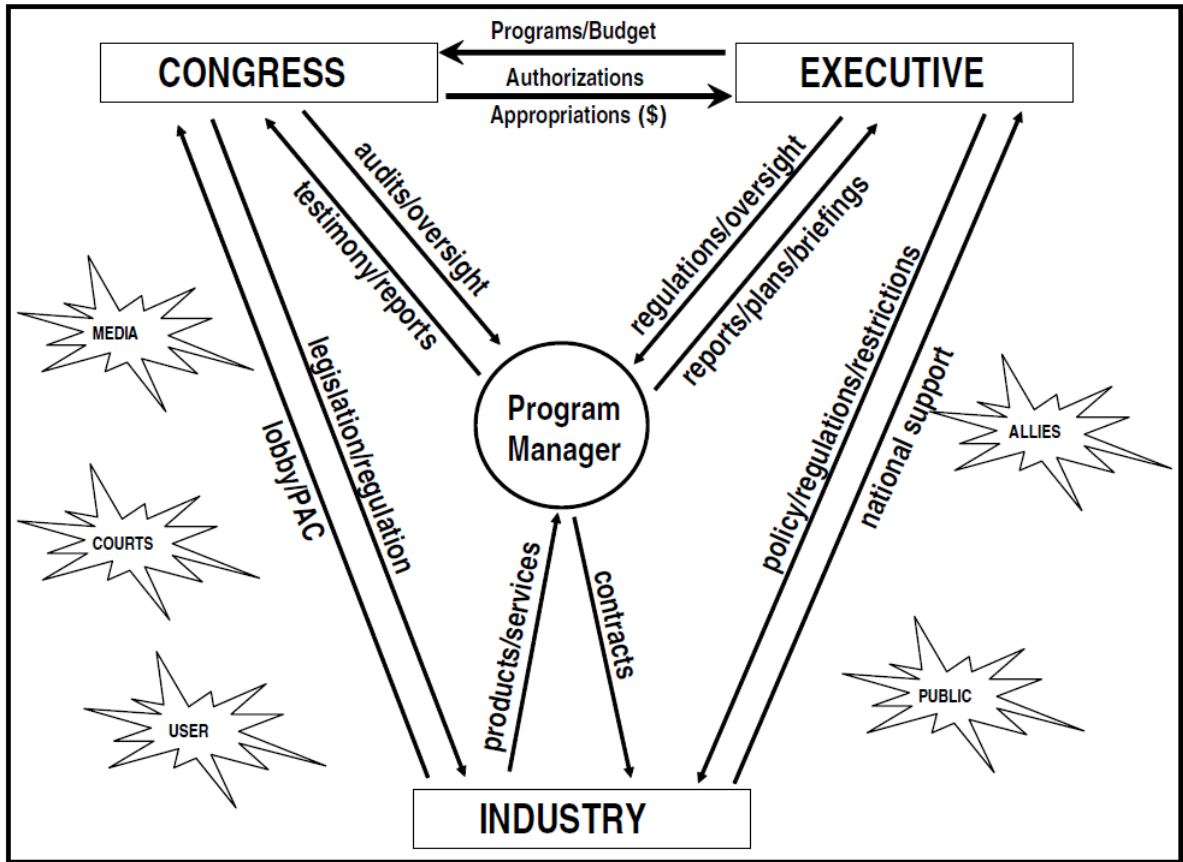


Figure 1. The Acquisition Environment
(From DAU, 2008, p. 5)

The next section will discuss the Defense Acquisition System. The Defense Acquisition System is the DoD's implementation of a program management approach to defense acquisition.

C. Defense Acquisition System

“The Defense Acquisition System exists to manage the Nation’s investments in technologies, programs, and product support necessary to achieve the National Security Strategy and support the United States Armed Forces” (DAU, 2009, Foreword).

The Defense Acquisition System (DAS) is the management process by which the DoD provides effective, affordable and timely systems to the users (DoDD,



2007). The DAS is based on centralized regulations and processes; however, a decentralized approach to program execution is granted to focus on efficient completion of acquisition activities (DAU, 2009, p. 1). The *DoD 5000* series was created to provide governing policy and direction for the acquisition of major defense systems. The following subsections will describe these directives.

1. DoD Directive 5000.01

Certified current as of November 20, 2007, *DoDD 5000.01* applies to DoD Major Defense Acquisition Programs (MDAP). The Defense Acquisition University (DAU) defines an acquisition program as a directed, funded effort that provides a new, improved or continuing material, weapon or information system or service capability in response to an approved need (DAU, 2008). The *Directive* establishes an investment strategy to posture the DoD to support today's needs as well as needs of future forces and requirements. Additionally, *DoDD 5000.01* states that the following principles will be followed in order to create a streamlined and effective organization: flexibility, responsiveness, innovation, and discipline. The *Directive* also states the DoD will "maintain a proficient acquisition, technology and logistics workforce that is flexible and highly skilled across a range of management, technical and business disciplines" (DoDD, 2007, p. 8).

However, the *Directive* does not provide guidance to specific defense systems. To govern the implementation of these acquisition policies and principles, *DoDI 5000.02* was created.

2. DoD Instruction 5000.02

The purpose of this instruction is to establish a simplified and flexible management framework for translating capability needs and technology opportunities, based on approved capability needs, into stable, affordable, and well-managed acquisition programs that include weapon systems, services, and Automated Information Systems (AIS). (DoDI, 2008, p. 1)



Current as of December 8, 2008, the *Instruction* also defines the responsibilities of the Milestone Decision Authority (MDA), Heads of the DoD Components (USD (AT&L), 2008), and PMs. The *Instruction* is divided into ten major sections that cover topics such as procedures, Acquisition Category (ACAT), acquisition of services, and program management. *DoDI 5000.02* also provides a diagram of the Defense Acquisition Management Process, as seen in Figure 2.

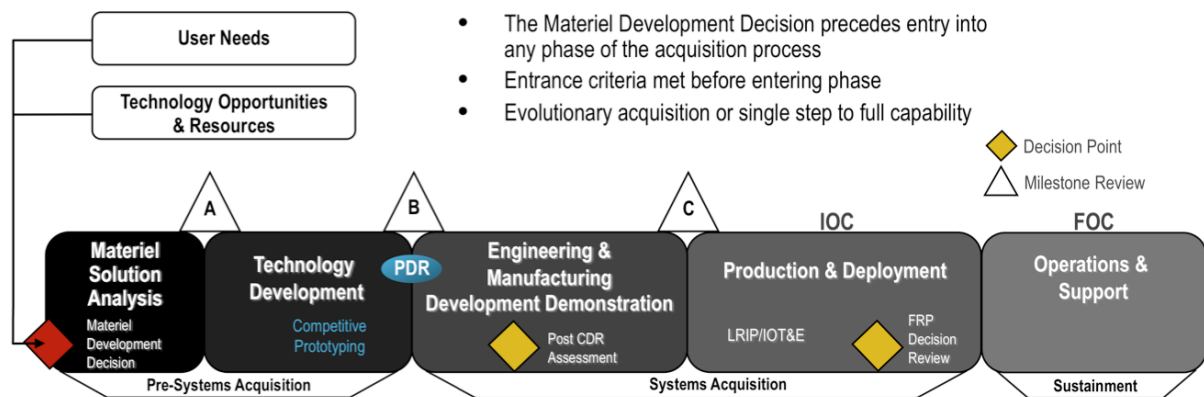


Figure 2. Defense Acquisition Management Process
(From USD (AT&L), 2008, p. 12)

The PM and MDA are required to use the Defense Acquisition Management Process when acquiring defense systems. The previous instruction allowed the MDA to authorize entrance into the acquisition system at any point; however, the new policy requires all programs proceed through a formal acquisition process. The progression through the acquisition lifecycle is dependent upon satisfactory knowledge acquired and efforts made by the PM. *DoDI 5000.02* provides a partial listing of the types of knowledge (based on demonstrated accomplishments) that enable accurate assessments of technology, design maturity, and production readiness (DAU, 2009, p. 39).

While the *DoDI 5000.02* defines the DoD acquisition management process and mandatory procedures, the *Federal Acquisition Regulation (FAR)* regulates



acquisition development and contracting as well as implements statutory requirements. The next subsection outlines the *FAR* and describes how this key regulation governs specific pieces of DoD acquisition.

3. *Federal Acquisition Regulation (FAR)*

The *FAR* is the primary regulation for use by federal executive agencies in the acquisition of supplies and services with appropriated funds (DAU, 2009). The *FAR* was established for the codification and publication of uniform policies and procedures for acquisitions by all executive agencies (GSA, 2009). In addition, the DoD has a supplement to the *FAR* called the *Defense Federal Acquisition Regulation Supplement (DFARS)*, which provides specific guidance on supporting *FAR* policy. The *FAR* is the utmost level of authority relating to contracting regulations and creates the common language in contracts initiated by the DoD.

Specifically pertaining to major systems acquisition, *FAR* Part 34 describes acquisition policies and procedures for use in acquiring these systems consistent with the *Office of Management and Budget (OMB) Circular No. A-109*. *FAR* Part 34 establishes the following criteria to define which acquisitions will be designated as major:

- Are directed at and critical to fulfilling an agency mission need
- Entail allocating relatively large resources for the particular agency
- Warrant special management attention, including specific agency-head decisions

FAR Part 34 continues to explain that the policies are designed to ensure that agencies acquire major systems in the most effective, economical, and timely manner.

The next subsection will discuss the statutory requirements that govern DoD acquisition.



D. Statutory Requirements

Statutory requirements are rules that are based on the passage of a statute by the legislative branch and must be followed under penalty of the law (DAU, 2009). This section will discuss four of these statutory requirements that have a direct impact on DoD Acquisitions.

1. ***Weapon Systems Acquisition Reform Act of 2009***

On May 22, 2009, President Obama signed into law the *Weapon Systems Acquisition Reform Act*. According to Senator Carl Levin, the sponsor of the *Reform Act*, “report after report has indicated that the key to successful acquisition programs is getting things right from the start with sound systems engineering, cost-estimating, and developmental—testing early in the program cycle” (Levin, 2009).

This *Act* recognized the fact that recent attempts at acquisition reform by the DoD had resulted in excessive cost growth and schedule delays due to personnel cuts in these critical acquisition areas. The *Weapon Systems Acquisition Reform Act* is divided into two titles: Acquisition Organization and Acquisition Policy. The key provisions of the *Reform Act* are the appointment of a Director of Systems Engineering who will be the principal advisor to the Secretary of Defense on systems engineering and will develop policies and guidance for the use of systems engineering as well as review, approve, and monitor such testing for each MDAP. The *Act* also contains a requirement that the Director of Defense Research and Engineering periodically assess technological maturity of MDAPs and annually report finding to Congress, requiring the use of prototyping, when practical. It requires that combatant commanders have more influence in the requirements generation process, and outlines changes to the *Nunn-McCurdy Act*, including rescinding the most recent Milestone approval for any program experiencing critical cost growth. Finally, the *Act* has a requirement that the DoD revise guidelines and tighten regulations governing conflicts of interest by contractors working on MDAPs (Schwartz, 2009, pp. 18–20).



The next act we will discuss is the *Clinger-Cohen Act of 1996*, which is specific to IT programs such as those managed by TCAQ.

2. *Clinger-Cohen Act of 1996*

The *Clinger-Cohen Act of 1996* is also known as the *IT Management Reform Act*. The *Act* assigns the OMB Director to be responsible for improving the acquisition, use, and disposal of IT systems. The OMB, in turn, created *Circular A-130* to develop processes for analyzing, tracking, and evaluating the risks and results of all major IT investments by Federal agencies. In addition, *Clinger-Cohen* requires each Agency Head to establish clear accountability for IT management activities by appointing a Chief Information Officer (CIO). The CIO is tasked to help control system development risks, better manage technology spending, and succeed in achieving real, measurable improvements in agency performance. *Clinger-Cohen* directly affects TCAQ because of its extensive IT program portfolio and recent delegation as Agency Head. Agency-head authority will be discussed in depth in Chapter III.

Two years before the *Clinger-Cohen Act* was signed into law, Congress attempted to reform DoD Acquisition with the passing of the *Federal Acquisition Streamlining Act*. This act will be discussed in the next section.

3. *Federal Acquisition Streamlining Act*

The *Federal Acquisition Streamlining Act (FASA)* was signed into law on October 13, 1994. The *Act* was created in response to Congressional concerns that federal agencies' acquisition practices were wasteful and cumbersome. Title V of the *Act* contains performance-based management provisions to foster the development of measurable cost, schedule and performance goals and incentives for acquisition personnel to reach these goals (GAO, 1997). In addition, the *FASA* called for the development of a Federal Acquisition Computer Network (FACNET) for automating the procurement process. FACNET was to be the preferred means for conducting government purchases above the \$2,500 micro purchase limit and below the



\$100,000 simplified acquisition threshold. Acquisitions over the micro purchase limit but not exceeding \$100,000 are reserved for small businesses. There are a few exceptions such as required sources of supply or a sole source. However, the 1998 *Defense Authorization Act* removed this statutory goal and allowed agencies to use other electronic contracting means.

In addition to the DoD Acquisition regulations and statutes described earlier, the *Defense Acquisition Workforce Improvement Act* is another important component that comprises the DAS. The next section will discuss this *Act* and the defense acquisition workforce as a whole.

4. *Defense Acquisition Workforce Improvement Act*

The *Defense Acquisition Workforce Improvement Act (DAWIA)* was initially Public Law 101–510 on November 5, 1990. *DAWIA* was intended to "improve the effectiveness of the personnel who manage and implement defense acquisition programs" (USC, 2004, p. 295). As part of the fiscal year 1991 *Defense Authorization Act*, the *Act* called for establishing an Acquisition Corps and professionalizing the acquisition workforce through education, training, and work experience. While the *Act* applied to both civilian and military personnel, it emphasized the need to offer civilians greater opportunities for professional development and advancement (Garcia, Keyner, Robillard & Van Mullekom, 1997).

DAWIA is divided into five subsections, as follows: General Authorities & Responsibilities, Defense Acquisition Positions, Acquisition Corps, Education & Training, and General Management Provisions. Under the subsection titled, Defense Acquisition Positions, *DAWIA* lists such positions as follows: Program Management, Engineering, Contracting, Financial Management, and Logistics. In addition, the minimum education, training, and experience requirements for each position are detailed in section 1723 of *DAWIA*. Finally, *DAWIA* outlines the establishment and implementation of policies and programs for each military department (DAU, 2009).



In addition to the previously mentioned statutes, the *Truth in Negotiation Act (TINA)* and the *Competition in Contracting Act (CICA)* also have a major effect on the program management policies and processes within the Defense Acquisition System.

The previous sections established the foundation of the DAS through the description of the applicable regulations, statutes and the DoD acquisition workforce. The next section will transition into a review of recent reports that describe the current state of the Defense Acquisition System.

E. Current State of the Defense Acquisition System

Even with an established system, educated workforce, and governing regulations and statutes, the Defense Acquisition System has experienced intense scrutiny from Congress. From 1986 through 2009, there have been numerous reports describing inefficiencies, inadequate performance, and other negative trends relating to the DAS. This research will discuss the findings of a sample of these reports to establish the current state of the DAS. The sample of reports that will be discussed include *A Quest for Excellence: Final Report to the President* (Packard, 1986), *GAO Report on Weapons Acquisition* (GAO, 1992), *The Defense Acquisition Performance Assessment* (Kadish, 2005), *Reforming the Defense Acquisition Enterprise* (Business Executives for National Security, 2009), and the *GAO Report to Congressional Committees, Defense Acquisition Assessment of Selected Weapon Programs* (GAO, 2009a).



1. A Quest for Excellence: Final Report to the President

In 1986, by order of President Reagan, a report was published about the current state of DoD Acquisition because of “the public’s shaken confidence in the effectiveness of the acquisition system” (Packard, 1986, p. 41). The commission’s charter was to “evaluate the defense acquisition system, to determine how it might be improved, and to recommend changes that can lead to the acquisition of military equipment with equal or greater performance but at lower cost and with less delay” (Packard, 1986, p. 41). The report gives an overview of the current acquisition process before outlining recommendations, some of which are in place today.

An establishment of certain positions was the Packard Commission’s first set of legislative recommendations. These positions include Undersecretary of Defense for Acquisition, Technology and Logistics (this is how the position is referred to today) and Service Acquisition Executives. Furthermore, education and training were emphasized for civilian contractors and government employees as well as emphasis on expertise requirements required by federal law (Packard, 1986, p. 53).

Program stability was the primary target of the Regulatory Recommendations Section. The commission first made mention of adopting *baselining* for major weapon systems at the beginning of engineering development. Baselining, in the sense mentioned above, refers to the “process in which all key participants in a program or project agree on the detailed description of the objectives and performance requirements, and commit to execute it accordingly” (“Baselining,” n.d.). The second major recommendation was to increase the level of use of multi-year contracts for systems that have a high priority. Furthermore, the commission makes mention of using industry-style competition, focusing more on overall best value rather than just on the lowest-price provider, luring in more quality suppliers at a lower price (Packard, 1986, p. 59).

The area of culture was the third segment on which the commission made recommendations. DoD Program Managers became the primary target for analysis



and recommendations. DoD PM's were identified in the report to be "unable to balance competing demands from special interest advocates, the Pentagon, and Congress, inevitably becoming a class of [humble petitioners] for these programs, as opposed to managers" (Business Executives for National Security, 2009, p. 62).

Specialized training and proper professional conditioning was said to be one of the remedies to the problem (Business Executives for National Security, 2009, p. 62). Professional conditioning refers to gaining experience in a specific acquisition-related field, such as program management, contracting, finance, etc. Additionally, reliance on the private sector for technology and commercial off-the-shelf (COTS) items, as well as increased weapon system prototyping, was stressed (Packard, 1986, p. 60). Improvement of cost estimations and increased information reliability were the basis for these recommendations (Business Executives for National Security, 2009, p. 62).

The final area that the commission addressed was that of the overall organization of the DAS. Joint requirement planning and the program-approval process were the focus of this section of the commission's report, stating that through a restructuring of the Joint Requirements and Management Board (JRMB), "the JRMB can make decisions on whether or not full-scale development of programs would be initiated, thus ultimately making it responsible for "affordability" or "make-or-buy" programs" (Business Executives for National Security, 2009, p. 63).

The report describes the affordability decision as a "decision [that] requires a subjective judgment be made on how much a new military capability is worth" (p. 63). Furthermore, "If a new weapon system can be developed and produced at that target cost, it may be authorized for development; otherwise, ways should be found to extend the life of the existing system" (Packard, 1986, p. 58). The report describes the make or buy decision as a "decision [that] requires the JRMB [to] assess the need for a unique development program, and determine if it is possible instead to buy or adapt an existing commercial or military system" (Packard, 1986, p. 59).



Additionally, the need for an increased caliber of acquisition personnel, as well as a higher pay scheme for government civilians, was mentioned.

The next report to be discussed will be a *GAO Report on Weapons Systems Acquisition*, this report was derived from the report *Getting to Best; Reforming the Defense Acquisition Enterprise* (Business Executives for National Security, 2009, p. 63). This report further documents the state of DoD acquisitions.

2. GAO Report on Weapons Acquisition

The December 1992 seminal report from the GAO on weapons acquisition focused on the two most prevalent factors in the defense acquisition process at the time. These factors were program cost increases and schedule delays. The GAO highlighted that these factors were very interdependent. Program cost increases normally drive a delay in schedule while a scheduling delay will likely force an increase in the program costs. Moreover, the report identified two causes for these factors: cultural and organizational.

The report defines a cultural cause as the collective patterns of behavior exhibited by the participants in the acquisition process as well as the incentives for that behavior. DoD Acquisitions has adopted a culture of blind obedience in which program sponsors lack the incentives to accurately present program risk assessments and realistic cost estimates. The cancellation of a program is viewed as a negative mark against the program manager and sponsor, even if the business case justifies it. The report recommends that incentives must motivate participants to produce better program success by emphasizing program affordability over program survival.

While the report does not specifically define what organizational cause means, it alludes to the acquisition policies that drive diligent analysis of mission needs and program costs. Once again, program managers and sponsors tend to underestimate costs and schedule times in order to meet the intent of these acquisition policies. The GAO highlights that some programs kept their estimates



low by excluding relevant costs, such as training and testing equipment. Organizational cause also includes the concept of concurrency. Concurrency is defined as the practice of beginning production before the completion of product development, testing, and evaluation. This program strategy is used to expedite the acquisition timeline of critical weapons systems. While the program's schedule may benefit from concurrency, the costs associated with future program readjustments have shown to outweigh the schedule gain.

The next report to be discussed is the *Defense Acquisition Performance Assessment*, which was published in 2006. This report was authored due to a “crisis of confidence” (Business Executives for National Security, 2009, p. 67), similar to the reason the Packard Commission was established. This report further documents the state of DoD Acquisition.

3. *Defense Acquisition Performance Assessment Report*

The *Defense Acquisition Performance Assessment (DAPA)* was Acting Secretary of Defense England's answer to the still-broken acquisition system in 2005. The team performing this assessment had the responsibility of analyzing “every aspect of acquisition, including requirements, organization, legal foundations [...] decision methodology, oversight, checks and balances—every aspect” (Kadish, 2005, Slide 4). The final product of this assessment would be “a recommended acquisition structure and processes with clear alignment of responsibility, authority, and accountability” (Kadish, 2005, Slide 4).

Before this assessment, over 100 acquisition-related studies had been completed on the DoD, yet similar problems still exist in the acquisition structure and organization. The top-level conclusions of the study discovered two main points. First, there are many deeply imbedded issues within the DoD's management systems (not just within the acquisition structure). Second, the only way for change to occur is for “radical changes” to be implemented in order to break old habits and standards that the acquisition workforce has come to accept (Kadish, 2005, Slide 6).



Ultimately, the assessment panel conducted research and reported significant recommendations for performance improvement in the following areas of the acquisition system: Organization, Workforce, Budget, Requirements, Acquisition, and Industry. These recommendations also came with deadlines for action in order to begin the DAS rebuilding process.

The DAS still has the reputation of being broken and not up to expected performance standards, which can be further documented in the next report discussed. The Business Executives for National Security is a “national, non-partisan, non-profit organization that harnesses successful business models from the private sector to help strengthen the nation’s security” (Business Executives for National Security, 2009, p. 45). This report further documents the current state of DoD acquisition.

4. Getting to Best: Reforming the Defense Acquisition Enterprise

In July 2009, the Business Executives for National Security (BENS) released a report outlining the current state of the United States Military’s acquisition process and offering recommendations to make the process more economical and effective. The Task Force assembled for this report, formed in 2008, was comprised of experts with business backgrounds in the commercial and defense sectors (Business Executives for National Security, 2009, p. 2). The charter for the Task Force was to examine the defense acquisition process from a *business* perspective and to make recommendations for consideration by Congress and the Department of Defense to improve that process (Business Executives for National Security, 2009, p. 2).

The Task Force breaks the report into sections that first outline the Principles of Successful Acquisition (Business Executives for National Security, 2009, p. v). The following items are identified by the BENS report as principles for successful acquisition programs:

- Agreement and alignment of interests and incentives of all stakeholders,



- Strategy and resources: Ends matched to means,
- Ability to attract and retain able and experienced people, and
- Commitment to ethical comportment in all activities. (Business Executives for National Security, 2009, p. v)

The report further breaks down the acquisition process and acquisition enterprise (the enterprise is comprised of the Department of Defense, participating industrial firms, and Congress) into three problem areas: Requirements Determination, Acquisition Workforce, and Program Execution (Business Executives for National Security, 2009, p. 6). Each area is then analyzed and suggestions for improvement are shown.

The Task Force first dissects the area of Requirements Determination. Defining and determining the requirements of a new program is arguably the most important step in the acquisition process. The Task Force discusses the problems with the requirements-determination process as

not coupling needs for specific future systems to an overall national defense strategy as well as, requirements being largely determined by the military services without realistic input as to what is technically feasible from an engineering perspective, and without adequate input as to what is affordable from a planning, programming and budgeting perspective. (Business Executives for National Security, 2009, p. 7)

Furthermore, the report continues to suggest that the Combatant Commanders need to take more of a role in short-term capabilities, whereas the military service chiefs should be the ones to focus on more long-term requirements (Business Executives for National Security, 2009, p. 7).

The second area the Task Force analyzes as an acquisition problem region is that of the acquisition workforce. The report discusses how the current workforce is understaffed for the workload requirements of today and the future. Furthermore, the Task Force mentions that although highly competent, the acquisition enterprise does lack some professional business skills recommended to perform at a high level and



in synergistic fashion with industry (Business Executives for National Security, 2009, p. 8).

Finally, the third area that the Task Force has identified is the program-execution phase of the acquisition process. The report states that

the [acquisition] system has insufficient systems engineering capability; cost estimating that injects unrealistic optimism into early program definition; dependence on many individuals with limited relevant experience; and little management flexibility to fix problems as they occur. (Business Executives for National Security, 2009, p. 8)

Following the analysis of the acquisition enterprise problem areas, the report then transitions into recommendations and modifications for each of the areas (Requirements Determination, Workforce, and Program Execution). The recommendations of the report are aimed at senior officials and policy-makers; however, some recommendations can be implemented at lower working levels. Additionally, recommendations from a summation of past reports, studies, commissions, and analyses are added to this report for reference purposes (Business Executives for National Security, 2009, p. 61).

The report adds to the list of prior research that highlights the problems with the defense acquisition enterprise and is further evidence of a broken acquisition system. The final report to be discussed is the *GAO Report to Congressional Committees, Defense Acquisitions Assessment of Selected Weapon Programs* (GAO, 2009a), which is a major weapon system approach to showing the current state of DoD acquisition.

5. *GAO Report to Congressional Committees, Defense Acquisition Assessment of Selected Weapon Programs*

This seventh annual GAO Defense Acquisition Assessment report provides a snapshot of how well the DoD is planning and executing its major weapon acquisition programs, an area that has been on the GAO High-risk List since 1990 (GAO, 2009b). The report includes the following areas:



- An analysis of the overall performance of the DoD's 2008 portfolio of 96 major defense acquisition programs and a comparison to the performance of the portfolio at two other points in time: 5 years ago and 1 year ago. The comparison figures are outlined in Table 1.
- An analysis of current cost and schedule outcomes and knowledge attained by key junctures in the acquisition process for a subset of 47 weapon programs, primarily in development, from the 2008 portfolio.
- Data on other factors, such as cost estimating, requirements, software management, and program office staffing that could affect program stability.
- An update on DoD acquisition policies.

Table 1. Analysis of DoD Major Defense Acquisition Program Portfolios
(From GAO, 2009b, p. 7)

Portfolio status	Fiscal year 2003 portfolio	Fiscal year 2007 portfolio	Fiscal year 2008 portfolio
Number of programs	77	95	98
Total planned commitments	\$1.2 trillion	\$1.6 trillion	\$1.6 trillion
Commitments outstanding	\$724 billion	\$786 billion	\$875 billion
Change to total research and development costs from first estimate	37 percent	40 percent	42 percent
Change in total acquisition cost from first estimate	19 percent	26 percent	25 percent
Estimated total acquisition cost growth	\$183 billion	\$301 billion*	\$296 billion
Share of programs with 25 percent or more increase in program acquisition unit cost	41 percent	44 percent	42 percent
Average delay in delivering initial capabilities	18 months	21 months	22 months



As indicated by placement on the GAO High-risk List, DoD acquisition has been, and remains, plagued with a history of massive cost overruns and schedule delays. The results of this GAO assessment are consistent with past troubles, and this most recent assessment comes at a time when the DoD is faced with added fiscal and administrative challenges. The ongoing Global War on Terror, among other factors, places a heavy burden on the defense budget, while a new administration is attempting to reign in a Federal deficit that has reached the highest point in history. Regardless of current challenges, it is imperative that areas of weakness within DoD acquisition be identified and that corrective actions continue to be implemented, closely monitored, and adjusted as necessary. Reports such as this GAO assessment provide valuable insight into the programs within the DoD that are underperforming. This data could be utilized to assess the project management capabilities and organizational structures of the various entities that own the specified programs outlined in the report. Ideally, this would lead to improved acquisition practices that would reverse the ongoing trend of programs being over budget and not meeting original schedules.

This GAO report provides insight into 96 major defense acquisition programs. Overall, the report indicates continued poor overall performance, with the good news being modest improvements in total cost growth and improved knowledge regarding technology and design at key points in the acquisition process. The downside is explained in the report as follows:

However, the cumulative cost overruns are still staggering—almost \$296 billion in fiscal year 2009 dollars—and the problems are pervasive. [...] [O]f DoD's 96 active major defense acquisition programs, 64 programs have reported increases in their projected cost since their initial cost estimate. (GAO, 2009b, p. 1)



The report claims that the DoD and the GAO agree on the following as key problem sources:

- Programs are started with poor foundations and inadequate knowledge for developing realistic cost estimates.
- Programs move forward with artificially low cost estimates, optimistic schedules and assumptions, immature technologies and designs, and fluid requirements.
- Changing or excessive requirements cause cost growth.
- An imbalance between wants and needs contributes to budget and program instability.

The problem sources listed above are closely related to the program-management processes and organizational structures that are the essence of this research. Accurate or inaccurate cost, schedule, and requirements analysis have been identified by the GAO as root causes of schedule and budget difficulties. Strength and accuracy in these areas begins with proven program-management processes and an organizational structure.

As mentioned in section C of this chapter, the Defense Acquisition System is the Department of Defense's implementation of a program-management approach to defense acquisition. An organizational assessment is one way of measuring how effective project management is in an organization. The next section will address the benefits and provide a sample of the organizational assessment tools.

F. Benefits and Samples of Organizational Assessment Tools

It is clear from the previous reports that acquisition organizations are constantly operating under various levels of change. Leadership succession, mission requirements, manpower constraints, and structure transformations are just a few examples of the types of events prompting change within acquisition organizations. Given that human resources play such a vital role in the success of organizations, it would only make sense to evaluate their reaction to change by assessing the



workforce's attitude and perception (Becton & Schraeder, 2009). Moreover, research supports the value of assessing the opinions and feelings of individuals relating to organizational change (Church, Siegal, Javitch, Waclawski & Burke, 1996). These assessments help leaders define areas needing additional change or improvement, and they set the stage for more in-depth planning and other efforts to address key organizational issues.

This section will discuss several established assessment tools such as Kerzner's Project Management Maturity Model (PMMM), Project Management Institute's (PMI) Organizational Project Management Maturity Model (OPM3), Frame's Project Management Competence Model, and the Software Engineering Institute's (SEI) Capability Maturity Model Integration (CMMI) for Acquisition (CMMI-ACQ) (Ver. 1.2). There are a multitude of areas that can be assessed in an organization; these samples of assessment tools each provide a unique perspective. Areas such as organizational maturity, capabilities and personnel competence are addressed by these assessment tools. The final tool to be discussed will be the *GAO Framework for Assessing the Acquisition Function at Federal Agencies*, which is the tool this research utilizes to assess TCAQ's organizational structure and process.

1. Kerzner's Project Management Maturity Model

In looking at various tools and frameworks for assessing the project-management function of an organization, Kerzner's research immediately comes to mind. His book *Project Management* is known as the top reference for the principles and concepts of project management. In Kerzner's 2001 book entitled *Strategic Planning for Project Management Using a Project Management Maturity Model*, he outlines a framework for establishing excellence in an organization's project-management discipline.

Kerzner's Project Management Maturity Model is based on five levels of maturity. The five levels are founded on the Project Management Body of Knowledge (PMBOK) and will be discussed in more detail below. The PMBOK is an



internationally recognized project-management industry standard and is based on nine knowledge areas: Integration, Scope, Time, Cost, Quality, Human Resource, Communications, Risk, and Procurement. “[T]he Project Management Maturity Model provides the reader with a step-by-step strategy for planning, designing, implementing, and improving project management” (Kerzner, 2001, p. xiv).

Furthermore, the tools that Kerzner provides will tell the reader “how mature” the organization actually is from a project-management standpoint and where in the model the organization fits. Once it is determined where the organization stands against the model, appropriate actions can be taken to increase the level of maturity.

Kerzner describes the five levels of his Project Management Maturity Model as follows:

Level 1—Common Language

In this level, the organization recognizes the importance of project management and the need for a good understanding of the basic knowledge of project management and the accompanying language/terminology. (Kerzner, 2001, p. 42)

Level 2—Common Processes

In this level, the organization recognizes that common processes need to be defined and developed such that successes on one project can be repeated on other projects. Also included in this level is the recognition of the application and support of the project management principles to other methodologies employed by the company. (Kerzner, 2001, p. 42)

Level 3—Singular Methodology

In this level, the organization recognizes the synergistic effect of combining all corporate methodologies into a singular methodology, the center of which is project management. The synergistic effects also make process control easier with a single methodology than with multiple methodologies. (Kerzner, 2001, p. 43)



Level 4—Benchmarking

This level contains the recognition that process improvement is necessary to maintain a competitive advantage. Benchmarking must be performed on a continuous basis. The company must decide whom to benchmark and what to benchmark. (Kerzner, 2001, p. 43)

Level 5—Continuous Improvement

In this level, the organizations evaluate the information obtained through benchmarking, and must then decide whether or not this information will enhance the singular methodology. (Kerzner, 2001, p. 43)

It is important to note that when organizations incorporate this model into their own project-management divisions, it is not uncommon to see overlapping of levels among different groups. For example, an organization can start benchmarking processes while they are continuing to train the workforce.

Additionally, Kerzner provides a separate customizable assessment tool (something any organization can use) for each level of the maturity model in order to determine how mature the organization is at each of the five levels.

The next assessment tool that will be discussed is the Project Management Institute's Organizational Project Management Maturity Model. This model, similar to Kerzner's, provides a baselining tool for organizations to assess various areas.

2. Project Management Institute's Organizational Project Management Maturity Model

PMI's OPM3 is a tool that assesses and assists program-management functions through an organizational project-management maturity model. OPM3 is a proprietary, web-based assessment tool available through PMI for purchase. Due to the proprietary nature of the tool, this report does not include a detailed analysis of the tool but provides a high-level view of the basic premise of OPM3. PMI defines organizational project management as “the alignment and systematic management of projects, programs and portfolios to achieve strategic organizational goals”



(Hargrove, 2009, Slide 4). OPM3 helps “identify gaps in capabilities that reduce business performance,” as well as recommend a strategy for the organization to increase “maturity” (Hargrove, 2009, Slide 6).

The current OPM3 takes into account the user community’s feedback from the first edition OPM3. Changes to the second edition of this model include

- Alignment with PMBOK (4th edition),
- Alignment with Program Management (2nd edition),
- Alignment with Portfolio Management (2nd edition), and
- Self-assessment Method Questions—Improved Architecture.

Statistics such as “organizations with less developed project management capabilities miss budgets by 20% and miss schedules by 40%” are mentioned, as well as other project management maturity value statements (Hargrove, 2009, Slide 7). The statements and statistics mentioned in the current OPM3 provide the users with data on how important it may be to have a mature organizational program-management function, and they allow users to decide if PMI’s OPM3 is the correct tool for their specific needs.

The next assessment tool that will be discussed is Frame’s Project Management Competence Model. This model focuses on project-management personnel competence, rather than focusing on the entire organization’s level of maturity.

3. Frame’s Project Management Competence

J. Davidson Frame is another well-known authority on the topic of project management. He has authored six books and numerous articles as well as served as a past Director of Certification for the Project Management Institute. Frame is currently a professor of graduate studies in the field of managing projects at the University of Management and Technology. His 1999 book entitled *Project Management Competence* provides definitions of project management competence,



examples, and suggested improvement methods, as well as assessment tools to measure project management competence in three different areas. Frame defines competence as “consistently producing desired results” (Frame, 1999, p. 11). According to Frame, the three areas of project competence are individual, team, and organizational.

In the area of individual competence, Frame’s research suggests that there are typically five “broad categories of project players.” (p. 11) These project players include the project manager, project sponsor, technical personnel, functional managers, and support staff. Frame claims that “if any of [the project players] are incompetent, the project is in jeopardy” (p. 6). Incompetent in this sense refers to a project player lacking the qualification or ability to perform assigned duties.

The second area that Frame addresses is that of team competence. Frame’s research suggests that simply having competent people assigned to a project is not the final solution to a successful project outcome. Team competence is needed in order to properly align team goals with one central focus. Willingness and the ability to work together is at the core of the area of team competence, as well as having the proper cross-functional spread of expertise in order to come up with the best solutions to problems and challenges.

The third and final area that Frame addresses is that of organizational competence. Frame discusses how organizational competence is the final piece of the puzzle when it comes to overall project management competence. Organizations that promote collaboration and are “sustaining an infrastructure that offers” (p. 9) employees with information to do their jobs effectively are the key attributes of an organization possessing the needed competence level in promoting successful project management.

Like Kerzner, Frame provides different assessments for each type of competence, based on the PMBOK, that suggest what level of competence the individual, team and/or organization possesses. Once the results from those



assessments are known, Frame offers suggestions and methods to improve those assessment results and achieve a higher level of desired competence, whether it is individual, team, organization, or all three.

The next model to be discussed is the Software Engineering Institute's (SEI) Capability Maturity Model Integrated (CMMI) for Acquisition (CMMI-ACQ) (Ver. 1.2). TCAQ's programs primarily consists of Information Technology, and the SEI model takes a specific look at how mature an organization is, in the context of software acquisition.

4. Software Engineering Institute's (SEI) Capability Maturity Model Integrated (CMMI) for Acquisition (version 1.2)

The SEI is a Federally Funded Research and Development Center (FFRDC) sponsored by the US Department of Defense (Software Engineering Institute, 2007, p. 2). The SEI offers solutions to government and industry in the form of several capability maturity models that cover a mass of information technology aspects. Such areas of SEI expertise include acquisition, security, software development, process management, risk, and system design.

Since information technology acquisition is the preponderance of the USTRANSCOM's acquisition portfolio, this section will focus on the acquisition-specific CMMI, version 1.2. Figure 3 outlines the basic history of SEI's various capability maturity models and how each are connected through a common foundation, referred to as the CMMI Model Foundation (CMF).



History of CMMs

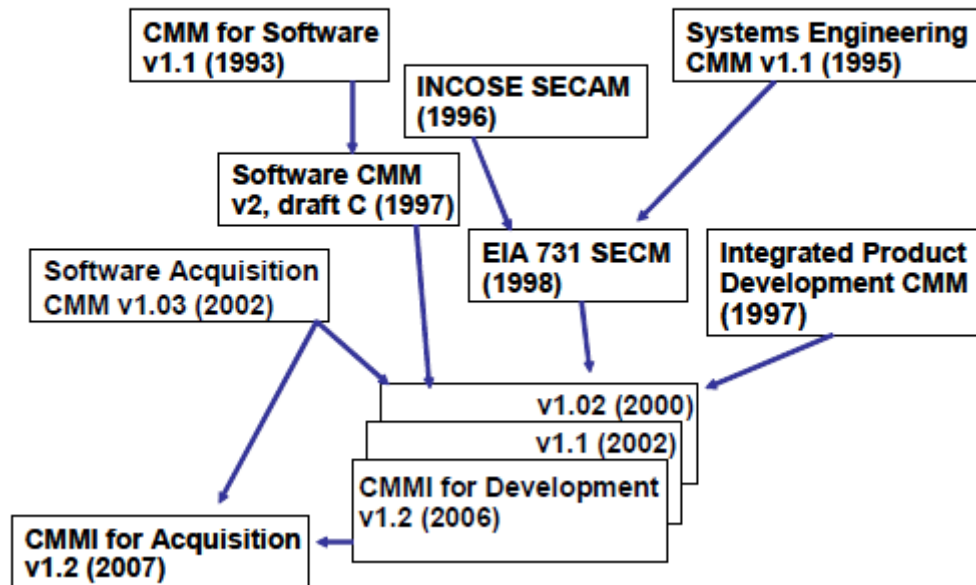


Figure 3. History of CMMs CMMI-ACQ, Version 1.2
(From Software Engineering Institute, 2007)

In SEI’s CMMI-ACQ framework, best practices from government and private industry are combined in order to give the user of the framework a reference of information to incorporate into an acquisition organization. The CMMI-ACQ is organized into 22 process areas. A process area is described as a “cluster of related practices [that], when implemented collectively, satisfies a set of goals considered important for making improvement in that area” (Software Engineering Institute, 2007, p. 22).

Out of the 22 total areas, 16 are referred to as foundation process areas. These areas discuss such topics as process management, project management, and support process areas. The remaining six process areas focus on acquisition-specific topics such as agreement management, acquisition requirements development, acquisition technical management, acquisition validation, acquisition



verification, and solicitation and supplier agreement development (Software Engineering Institute, 2007, p. 16). The mentioned process areas in the CMMI-ACQ only focus on the activities in which the acquirer engages, and it does not include the supplier activities.

The backbones of the CMMI-ACQ model are the components that make up the 22 process areas. Within each process area are three categories of components, which are meant to improve an organization's acquisition processes if followed/incorporated. The three categories of components are required components, expected components, and informative components.

Required components are described by the CMMI-ACQ as follows:

Components that describe what an organization must achieve to satisfy a process area; an achievement that must be visibly implemented in an organization's processes; CMMI components that are specific and generic goals; and goal satisfaction is used in appraisals as the basis for deciding whether a process area has been satisfied. (Software Engineering Institute, 2007, p. 21)

Expected components are described by the CMMI-ACQ in the following way:

Expected components describe what an organization may implement to achieve a required component; expected components guide those who implement improvements or perform appraisals; and the expected components are the specific and generic practices (Software Engineering Institute, 2007, p. 21).

Informative components are described by the CMMI-ACQ in this way:

Informative components provide details that help organizations understand the required and expected components; sub practices, typical work products, goal and practice titles, goal and practice notes, examples, and references are all examples of informative model components (Software Engineering Institute, 2007, p. 21).

Figure 4 depicts the relationships between a specific process area and the three component categories.



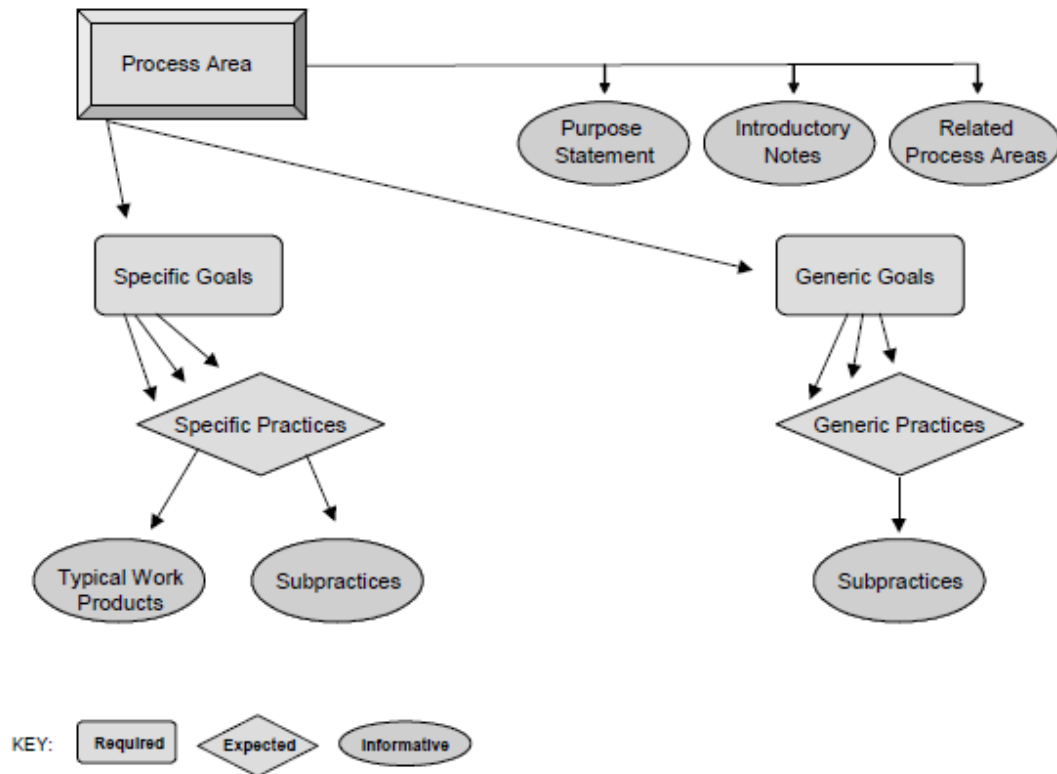


Figure 4. Process Area Relationships, CMMI-ACQ, Version 1.2
(From Software Engineering Institute, 2007)

The end goal after using the CMMI-ACQ is to assess what maturity level the organization currently falls into and to follow the recommended guidelines in order to increase the organization's level of maturity. The maturity levels follow a scale from one to five, with five being at the peak of the scale. The CMMI-ACQ goes into great detail on each level of maturity and discusses what requirements must be satisfied in order to transition from one level to the next.

After evaluating each organizational assessment model, our research determined that the *GAO Framework for Assessing the Acquisition Function at Federal Agencies* would provide our team with the best tool to analyze TCAQ's acquisition organization. The GAO's primary mission is to provide audits and reports to Congress on various federal agencies. The next section will discuss the organizational assessment tool provided by the GAO that will be used for this research.



G. *GAO Framework for Assessing the Acquisition Function at Federal Agencies*

In response to the current fiscal demands and challenges that face federal agencies, the GAO created a framework to enable high-level, qualitative assessments of its acquisition function. This *GAO Framework* was designed to help agency leaders identify areas that require additional attention and provide a basis for research. The framework was created via a partnership between the GAO, the federal government, and industry experts in human capital, information management, financial management and acquisition practices. As seen in Figure 5, the *GAO Framework* consists of four cornerstones: Organizational Alignment and Leadership; Processes and Policies; Human Capital; and Knowledge and Information Management.



Cornerstones	Elements	Critical Success Factors
Organizational Alignment and Leadership	Aligning Acquisition with Agency's Missions and Needs	<ul style="list-style-type: none"> • Assuring Appropriate Placement of the Acquisition Function • Organizing the Acquisition Function to Operate Strategically • Clearly Defining and Integrating Roles and Responsibilities
	Commitment from Leadership	<ul style="list-style-type: none"> • Clear, Strong, and Ethical Executive Leadership • Effective Communications and Continuous Improvement
Policies and Processes	Planning Strategically	<ul style="list-style-type: none"> • Partnering with Internal Organizations • Assessing Internal Requirements and the Impact of External Events
	Effectively Managing the Acquisition Process	<ul style="list-style-type: none"> • Empowering Cross-Functional Teams • Managing and Engaging Suppliers • Monitoring and Providing Oversight to Achieve Desired Outcomes • Enabling Financial Accountability
	Promoting Successful Outcomes of Major Projects	<ul style="list-style-type: none"> • Using Sound Capital Investment Strategies • Employing Knowledge-Based Acquisition Approaches
Human Capital	Valuing and Investing in the Acquisition Workforce	<ul style="list-style-type: none"> • Commitment to Human Capital Management • Role of the Human Capital Function
	Strategic Human Capital Planning	<ul style="list-style-type: none"> • Integration and Alignment • Data-Driven Human Capital Decisions
	Acquiring, Developing, and Retaining Talent	<ul style="list-style-type: none"> • Targeted Investments in People • Human Capital Approaches Tailored to Meet Organizational Needs
	Creating Results-Oriented Organizational Cultures	<ul style="list-style-type: none"> • Empowerment and Inclusiveness • Unit and Individual Performance Linked to Organizational Goals
Knowledge and Information Management	Identifying Data and Technology that Support Acquisition Management Decisions	<ul style="list-style-type: none"> • Tracking Acquisition Data • Translating Financial Data into Meaningful Formats • Analyzing Goods and Services Spending
	Safeguarding the Integrity of Operations and Data	<ul style="list-style-type: none"> • Ensuring Effective General and Application Controls • Data Stewardship

Figure 5. Framework for Assessing the Acquisition Function at Federal Agencies
(From GAO, 2005b)



The *GAO Framework* is organized in a way that each cornerstone is further broken down into elements. The elements are, in turn, arranged to address critical success factors. For this study, our team utilized the first two cornerstones to analyze TCAQ.

1. Organizational Alignment and Leadership

According to the *GAO Framework*, organizational alignment is the appropriate placement of the acquisition function in the organization, with stakeholders having clearly defined roles and responsibilities. Acquisition leadership works hand-in-hand with choosing the appropriate organizational alignment. The *GAO Framework* continues by saying that executive leadership is the key to obtaining and maintaining organizational support for executing the acquisition function. This cornerstone is divided into two elements: (1) Aligning Acquisition with Agency's Mission and Needs, and (2) Commitment from Leadership.

a. Aligning Acquisition with Agency's Mission and Needs

The Aligning Acquisition with Agency's Mission and Needs element discusses three critical success factors to enable an organization to utilize this cornerstone effectively. These critical success factors are assuring appropriate placement of acquisition function, organizing the acquisition function to operate strategically, and clearly defining and integrating roles and responsibility. TCAQ has recently reorganized its acquisition directorate in an attempt to properly align acquisition with the mission and needs of the user. For this research, we will only discuss the last two factors (organizing the acquisition function to operate strategically and clearly defining the integrating roles and responsibility) since the appropriate placement of the acquisition function is not in question.

(1) Organizing the Acquisition Function to Operate Strategically. The first critical success factor we will investigate is organizing the acquisition function to



operate strategically. The GAO found that leading organizations transform their acquisition function from a supporting unit to one that is strategically important to the bottom-line success of the organization. The *Framework* suggests questioning if the organization has metrics related to acquisition efficiency and effectiveness. According to the GAO, a successful acquisition function's mission should be well defined and its vision, core values, goals and strategies should be consistent with the organization's overall mission.

(2) Clearly Defining and Integrating Roles and Responsibilities. The second critical success factor under the cornerstone of aligning acquisition with an agency's missions and needs is clearly defining and integrating roles and responsibilities. According to the GAO, effectively meeting an organization's mission generally reflects a consistent, cross-functional and multidisciplinary approach. In addition, the *GAO Framework* suggests looking for cross-functional communication in which stakeholders understand other stakeholders' roles in the acquisition process. Finally, the GAO cautions against unresolved conflicts among stakeholders, which can result in inefficient operations.

b. Commitment from Leadership

The second element of the cornerstone organizational alignment and leadership is commitment from leadership. The GAO recognizes the organizations that were noted for their best practices cited leadership as the most important factor in providing direction and vision. Commitment from leadership is divided into two critical success factors: (1) clear, strong and ethical executive leadership, and (2) effective communication and continuous improvement.

(1) Clear, Strong and Ethical Executive Leadership. Having a clear, strong and ethical leader unifies an organization to work with a common purpose. To determine if an organization has this type of leadership, the GAO recommends asking whether managers at all levels are held accountable for their contributions to the acquisition process and whether senior leadership has articulated a strategic,



organization–wide vision for the acquisition function. The *GAO Framework* recommends several questions to ask when evaluating an acquisition organization. The answers to these questions provide an indication of how well an organization is positioned for success in the future.

(2) **Effective Communication and Continuous Improvement.** The final critical factor under the element of commitment from leadership is effective communication and continuous improvement. The mission, vision and ideals of a leader are only as valuable as the leader’s ability to communicate them to his or her organization. According to the GAO, leaders should use meaningful metrics to measure effectiveness of their communication. The *GAO Framework* recommends that performance measures be used by leaders to gain an understanding of the organization’s current level of performance, its processes that need immediate attention, its improvement goals, and its results over time. In addition, personnel should be asked for their views on the effectiveness of communication and areas for improvement throughout the organization.

2. Policies and Processes

The second cornerstone that our team used to analyze TCAQ Acquisition is policies and process. The *GAO Framework* describes policies and processes as the basic principles that govern the way an agency performs acquisition functions. Effective policies and processes provide guidelines for the personnel in an organization. These policies and processes should be continuously reviewed to ensure they are still current and effective based on changes in technology and regulations. Organizations with outdated policies and processes suffer from work redundancy, schedule delays and cost overruns.



The cornerstone of policies and processes is divided into three elements: planning strategically, effectively managing the acquisition process, and promoting successful outcomes of major projects. For this research, our team will focus on the element of effectively managing the acquisition process.

a. Effectively Managing the Acquisition Process

Whether an organization is public or private, one constant remains the same: it must effectively manage its acquisition process. Given the budget constraints of today's economy, effective management is more important than ever before. This is why we decided to concentrate our research on this section of the *GAO Framework*. This element is further separated into four critical success factors: Empowering Cross-functional Teams, Managing and Engaging Suppliers, Monitoring and Providing Oversight to Achieve Desired Outcomes, and Enabling Financial Accountability.

(1) Empowering Cross-functional Teams. Successful acquisition is only accomplished using a variety of disciplines and professional skills found throughout an organization. Empowering cross-functional teams allows these professionals the freedom to make decisions based on their analysis and experience. Empowerment creates a sense of ownership in the members of a team and enhances their investment into the success of the program. The GAO highlights that open, honest and clear communication among all the members is a key factor in the success of the cross-functional team.

(2) Managing and Engaging Suppliers. How well an organization manages and engages its suppliers is another critical factor in the success of a program. The *GAO Framework* states that good relationships with suppliers in acquisition organizations can lead to lower costs, higher quality and shorter product design and delivery time. One strategy the GAO recommends is to establish and maintain effective communication and feedback systems with suppliers. Collaboration between an organization and its suppliers is much more beneficial to a program than



if there is an adversarial relationship. According to the article *8 Ways to Build Collaborative Teams* in the *Harvard Business Review*, a team's success or failure at collaborating reflects the philosophy of top executives in the organization (Gratton & Erickson, 2007). These top executives should implement policies involving an organization and its suppliers that lead to win-win situations as much as possible. In addition, a successful organization trains its workforce in the skills and nuances of managing and engaging suppliers. Furthermore, the GAO cautions organizations not to depend on only one or two key suppliers. Limiting the number of key suppliers has the potential to shift the power in the relationship from the organization to the suppliers because of the lack of competition. Finally, the *GAO Framework* also warns about *not* taking full advantage of suppliers' intellectual capital, such as design or product ideas.

(3) **Monitoring and Providing Oversight to Achieve Desired Outcomes.** The federal government relies heavily on contractors to complete particular missions. This reliance requires effective oversight by a well-trained and competent workforce. The *GAO Framework* questions whether the organization clearly defines the roles and responsibilities for those who perform this contract management and oversight. The GAO then highlights the Earned Value Management (EVM) method as one way to monitor a large project's cost, schedule and performance.

(4) **Enabling Financial Accountability.** The final critical success factor under this element is Enabling Financial Accountability. In these days of decreased budgets and increased Congressional oversight, financial accountability must be in the forefront of every DoD organization. The GAO poses the question, does the acquisition workforce have access to and use timely contractual information to monitor and oversee individual acquisitions? The *GAO Framework* recommends investigating whether an organization reports frequently enough (monthly/quarterly) to ensure accountability in the acquisition function. Finally, the GAO states that when financial data is not useful, timely, or reliable, there is an increased risk of inefficient and wasteful business practices.



H. Summary

Chapter II provided a comprehensive review of the current literature addressing the issues in DoD acquisitions. The chapter discussed the policies and procedures that govern the world of the Defense Acquisition System. Then, the current state of acquisition in the federal government was examined through a sample of relevant reports. Furthermore, this chapter investigated various organization assessment tools and concluded with a review of the *GAO Framework for Assessing the Acquisition Function at Federal Agencies*. Chapter III will discuss the history, mission and components of the USTRANSCOM as well as its Acquisition Command.



III. USTRANSCOM

A. Introduction

This chapter provides an overview of the United States Transportation Command (USTRANSCOM) and its major component organizations. It also provides background information on the USTRANSCOM's acquisition authority. Finally, this chapter discusses the organizational structure and program management activities of the USTRANSCOM's Acquisition Command.

B. USTRANSCOM

The mission of the USTRANSCOM is as follows: develop and direct the Joint Deployment and Distribution Enterprise to globally project strategic national security capabilities; accurately sense the operating environment; provide end-to-end distribution process visibility; and offer responsive support of multinational and non-governmental logistical requirements that are jointly approved by the US government and the Secretary of Defense (USTRANSCOM, 2009a). The Command's vision is to synchronize and deliver unrivaled, full-spectrum, deployment and distribution solutions (USTRANSCOM, 2009a). The USTRANSCOM's total wartime capability consists of a diverse force: 51,853 active duty; 88,089 reserve and Guard; and 16,606 civilian personnel. Similarly, the USTRANSCOM relies on its commercial partners to meet 88% of continental US land transport, 50% of global air movement, and 64% of global sealift (USTRANSCOM, 2009a). The USTRANSCOM currently controls a fleet of military assets valued in excess of \$52 billion, including 87 ships; 1,269 aircraft; 2,150 railcars and assorted equipment, and \$1.4 billion in infrastructure, as well as access through commercial partners to more than 1,001 aircraft and 360 vessels in the Civil Reserve Air Fleet (CRAF) and Voluntary Intermodal Sealift Agreement (VISA), respectively (USTRANSCOM, 2009a).



In 1979, the Joint Chiefs of Staff (JCS) established a single manager for deployment and execution called the Joint Deployment Agency (JDA) (Webb, 2000). The JDA's mission was to integrate deployment procedures for the different Services. The JDA's creation was the result of a command post exercise conducted in 1978 called "Nifty Nugget." Nifty Nugget was the first government-wide mobilization exercise that simulated an attack by the Warsaw Pact on the forces of the North Atlantic Treaty Organization in Europe. The exercise exposed significant issues in the mobilization and deployment plans of the military and civilian participants. However, after numerous failed exercises and a limited role in the Grenada invasion, it was obvious that the JDA did not have the authority to direct each Service to adhere to joint milestones concerning transportation. The 1986 Packard Commission report recommended the establishment of a unified transportation command. On April 1, 1986, President Ronald Reagan signed *National Security Decision Directive (NSDD) 219*, creating this unified transportation command (USG, 2009, p. 4).

I also support the recommendation of the Commission that the current statutory prohibition on the establishment of a single Unified Command for transportation be repealed. Assuming this provision of law will be repealed, the Secretary of Defense will take those steps necessary to establish a single Unified Command to provide global air, land, and sea transportation. (Reagan, 1987)

The United States Transportation Command was established on April 18, 1987, by order of President Ronald Reagan (Reagan, 1987). Scott Air Force Base, Illinois, was selected as headquarters of the new unified transportation command. Scott AFB was the logical choice to allow the USTRANSCOM's leadership access to Military Airlift Command's expertise in command and control. Air Force General Duane H. Cassidy was nominated by President Reagan and was later confirmed by the Senate as the first Commander of the USTRANSCOM.

Originally, the USTRANSCOM's authority over the different Services' transportation resources was restricted to only wartime situations (Matthews, 1990). The opening test of the new transportation command's effectiveness was during



Operation Desert Shield/Storm. Operation Desert Shield/Storm marked the first major conflict by the United States' military in which the Commander in Chief directing the war had direct contact with only one organization for its transportation needs. During this time, the USTRANSCOM moved 504,000 passengers, 3.6 million tons of dry cargo, and 6.1 million tons of petroleum products—the equivalent of two Army corps, two Marine expeditionary forces, and 28 Air Force tactical fighter squadrons (GAO, 1992).

Following the success of the USTRANSCOM during Operation Desert Shield/Storm, senior military leaders recommended that the Command be given the same authority during peacetime as it enjoyed during the war. On February 14, 1992, the USTRANSCOM's mission was broadened to include the direction of transportation resources during both peace and war by *DoD Directive 5158.3* (USD (AT&L), 2007). The Secretary of Defense gave the USTRANSCOM a new charter: “to provide air, land and sea transportation for the Department of Defense, both in time of peace and time of war” (USTRANSCOM, 2009a).

Since Desert Shield/Storm, the USTRANSCOM has continued to prove its worth during contingencies such as Desert Thunder (enforcement of UN resolutions in Iraq) and Allied Force (NATO operations against Serbia) as well as during peacekeeping endeavors—for example, Restore Hope (Somalia), Support Hope (Rwanda), Uphold Democracy (Haiti), Joint Endeavor (Bosnia-Herzegovina), and Joint Guardian (Kosovo) (USTRANSCOM, 2009). After the attacks on September 11, 2001, the USTRANSCOM became a crucial partner in the United States' Global War on Terror. In support of Operation Enduring Freedom and Iraqi Freedom, the USTRANSCOM has transported over 2.2 million passengers and approximately 6 million short tons of cargo (USTRANSCOM, 2009a).

In September 2003, the Secretary of Defense designated the Commander of the USTRANSCOM as the DoD Distribution Process Owner (DPO). The DPO serves as the single entity to direct and supervise execution of the Strategic Distribution system. The DPO's mission is to improve in-transit visibility, eliminate



gaps between the strategic and theater-level distributions processes, and improve the overall efficiency and interoperability of distribution-related activities—deployment, sustainment, and redeployment support during peace and war. The consolidation of authority under one process owner is aimed at realizing the following logistics efficiencies:

- Eliminate existing seams between current distribution processes and standardize the policies, vision and performance goals in the DoD's supply chain;
- Drive interoperable information-technology solutions and enhance total asset visibility to distribution customers;
- Institutionalize sustainment planning into DoD contingency processes; and
- Streamline distribution accountability under a single combatant commander (provide one single accountable person for the combatant commander to contact for their distribution needs).

C. Components of the USTRANSCOM

The USTRANSCOM is comprised of three component commands—The Air Force's Air Mobility Command, Scott AFB, Illinois; the Navy's Military Sealift Command, Washington, DC; and the Army's Military Surface Deployment and Distribution Command, Alexandria, Virginia. These component commands provide intermodal transportation across the spectrum of military operations.

1. Air Mobility Command

Air Mobility Command's (AMC) mission is to provide global air mobility with the right effects, right place, and right time. The Command also plays a crucial role in providing humanitarian support at home and around the world. AMC Airmen—active duty, Air National Guard, Air Force Reserve and civilians—provide airlift and aerial refueling for all of America's armed forces. Many special duty and operational support aircraft and stateside aeromedical evacuation missions are also assigned to



AMC. US forces must be able to provide a rapid, tailored response and have the capability to intervene against a well-equipped foe, hit hard, and terminate quickly.



Rapid global mobility lies at the heart of US strategy in this environment; without the capability to project forces, there is no conventional deterrent. As the number of US forces stationed overseas continues to decline, global interests remain, making the unique capabilities only AMC can provide even more in demand (US Air Force, 2009). The Command's vision is Unrivaled Global Reach for America—Always (US Air Force, 2009)! AMC has nearly 136,000 active-duty and Air Reserve Component military and civilian personnel (US Air Force, 2009). AMC's mobility aircraft include the C-5 Galaxy, KC-10 Extender, C-17 Globemaster III, C-130 Hercules and KC-135 Stratotanker. Operational support aircraft are the VC-25 (Air Force One), C-9, C-20, C-21, C-32, C-37, C-40 and UH-1 (AMC, 2009).

Air Mobility Command began on June 1, 1992, when the Military Airlift Command and the Strategic Air Command were inactivated and Air Mobility Command was formed from elements of these two organizations. AMC melded a worldwide airlift system with a tanker force that had been freed from its commitments by the collapse of the Soviet Union. AMC has undergone considerable change since its establishment. Focusing on the core mission of strategic air mobility, the Command divested itself of infrastructure and forces not directly related to Global Reach. The Air Rescue Service, intratheater, aeromedical airlift forces based overseas, and much of the operational support airlift fleet were transferred to other commands. However, KC-10 and most KC-135 air-refueling aircraft initially assigned to Air Combat Command were transferred to AMC, along with Grand Forks AFB, McConnell AFB, and Fairchild AFB.

On October 1, 2003, AMC underwent a major restructuring, bringing a warfighting role to its numbered air force. AMC reactivated the 18th AF and redesignated its two former numbered air forces as the 15th Expeditionary Mobility Task Force (EMTF), with headquarters at Travis AFB, and the 21st EMTF, with headquarters at McGuire AFB. AMC's ability to provide global reach is tested daily. From providing fuel, supplies, and aeromedical support to troops on the frontline of the Global War on Terrorism to providing humanitarian supplies to hurricane, flood,



and earthquake victims both at home and abroad, AMC has been engaged in almost nonstop operations since its inception. Command tankers and airlifters have supported peacekeeping and humanitarian efforts in Afghanistan, Bosnia, Iraq, Cambodia, Somalia, Rwanda, and Haiti and continue to play a vital role in the ongoing Global War on Terrorism. These many examples of the effective application of non-lethal air power indicate that air mobility is a national asset of growing importance for responding to emergencies and protecting national interests around the globe.

2. Military Sealift Command

Military Sealift Command's (MSC) mission is to support the US by delivering supplies and conducting specialized missions across the world's oceans (US Navy, 2009). MSC's vision is to be the leader in innovative and cost-effective maritime solutions (US Navy, 2009).

MSC has a workforce of more than 9,000 people worldwide, about 80% of whom serve at sea. More than half of MSC's workforce is made up of civil service mariners who are federal employees. The remainder includes commercial mariners, civil service personnel ashore, and active-duty and reserve military members. All MSC ships, unlike other US Navy ships, are crewed by civilians, and some ships also have small military departments assigned to carry out communication and supply functions (US Navy, 2009). Military Sealift Command currently operates 112 non-combatant, civilian-crewed ships worldwide. In addition, the Command has access to 53 other ships that are kept in reduced operating status, ready to be activated if needed.

During World War II, four separate government agencies controlled sea transportation. In 1949, the Military Sea Transportation Service (MSTS) became the single managing agency for the Department of Defense's ocean transportation needs. MSTS assumed responsibility for providing sealift and ocean transportation for all military Services as well as for other government agencies.



During the Vietnam War, Military Sea Transportation Service (MSTS) was renamed Military Sealift Command. Between 1965 and 1969, MSC transported nearly 54 million tons of combat equipment and supplies and nearly 8 million tons of fuel to Vietnam. MSC ships also transported troops to Vietnam. The Vietnam era marked the last use of MSC troop ships. Now, US troops are primarily transported to theater by air. Through the 1970s and 1980s, MSC provided the Department of Defense with ocean transportation in support of US deterrent efforts during the Cold War years.

During the first Persian Gulf War's operations Desert Shield and Desert Storm, MSC distinguished itself as the largest source of defense transportation of any nation involved. MSC ships delivered more than 12 million tons of wheeled and tracked vehicles, helicopters, ammunition, dry cargo, fuel and other supplies and equipment during the war. At the height of the war, MSC managed more than 230 government-owned and -chartered ships.

Since September 11, 2001, MSC ships have played a vital and continuing role in the Global War on Terrorism. As of July 2008, MSC ships had delivered more than 12 billion gallons of fuel and had moved 100 million square feet of combat equipment and supplies to US and coalition forces engaged in operations Enduring Freedom and Iraqi Freedom (US Navy, 2009).

3. Army Military Surface Deployment and Distribution Command

The mission of Surface Deployment and Distribution Command (SDDC) is to provide global surface deployment and distribution services to meet the nation's objectives (US Army, 2009). Its vision is to provide tailored and agile capability and sustainment solutions that meet the warfighters' requirements (US Army, 2009).

The SDDC has a workforce of more than 4,600 people worldwide. Approximately 57% of SDDC's workforce is made up of Guard and Reserve personnel while the remainder is comprised of active-duty and federal civilians (US Army, 2009). Without owning a single truck, train, barge or ship, SDDC successfully



coordinates and leverages the capability of the commercial transportation industry and other military assets to create an efficient flow of materials worldwide. The SDDC has 24 port terminal units spread throughout the continental United States and the world (US Army, 2009).

The SDDC traces its organizational lineage to the Army's former Office of the Chief of Transportation, established July 31, 1942. Fourteen years later, the Department of Defense established a separate agency to carry out traffic management functions. On May 1, 1956, SDDC's original mandate began when the Secretary of Defense designated the Secretary of the Army as the single manager for military traffic within the United States. To execute this centralized management concept, a joint-Service planning staff was formed to establish an agency, the Military Traffic Management and Terminal Service (MTMTS). The DoD then formally activated MTMTS as a jointly staffed Army major command on February 15, 1965. MTMTS assumed all responsibilities assigned to the Defense Traffic Management Service and the terminal operations functions of the US Army Supply and Maintenance Command (a component of the Army Materiel Command).

With the approval and publication of its single-manager charter on June 24, 1965, MTMTS joined the Military Air Transport Service (now Air Mobility Command) and the Military Sea Transport Service (now Military Sealift Command) in providing complete transportation services to the Department of Defense. On October 1, 1988, MTMTS, along with the Military Sealift Command and the Military Airlift Command, officially became components of the United States Transportation Command.

During 2001 and throughout 2002, MTMC mobilized Reserve Transportation units and organized Deployment Support Teams as part of its support for the Global War on Terrorism. From October 2002–May 2003, the Command supported Operations Enduring Freedom and Iraqi Freedom, moving over 15,000,000 square feet of cargo, operating from 16 seaports and power-projection platforms worldwide.



With the USTRANSCOM's designation as the DoD's Joint Distribution Process Owner in the fall of 2003 and as a result of MTMC's changed missions to meet the demands of the Global War on Terror, the Command changed its name officially on January 1, 2004, to the Military Surface Deployment and Distribution Command. The name change better reflects its increased emphasis on deployment operations and end-to-end distribution of surface cargoes from depots to the warfighters (US Army, 2009).

D. Acquisition Authority

The USTRANSCOM was authorized to procure commercial transportation when it was established in 1987. However, to do so, USTRANSCOM first needed a delegation of authority from the Office of the Secretary of Defense. The USTRANSCOM did not seek such a delegation at that time and, instead, executed the acquisition mission through its components: AMC, MSC, and SDDC.

AMC was tasked with procuring airlift services from commercial air carriers. AMC also manages the Civil Reserve Air Fleet (CRAF). The CRAF is a DoD program designed to award industry with peacetime business for wartime commitment. In addition, AMC establishes contracts with other charter airlift and express services such as Federal Express and United Parcel Service.

MSC procures sealift services for the USTRANSCOM. MSC's contracts include long-term charters for dry cargo ships to support the peacetime mission. Additionally, MSC provides access to short-term voyage charters to support exercises and emergency situations.

SDDC is in charge of procuring the movement of containerized cargo worldwide to include sealift and land surface movement. SDDC utilized a program called the Voluntary Intermodal Sealift Agreement (VISA). The VISA program awards the DoD's peacetime business to industry based on a carrier's level of commitment of sealift capacity for DoD use during contingencies (USTRANSCOM, 1998).



Following its designation as the DPO in 2003, the USTRANSCOM determined that it needed the authority to establish its own acquisition capability that could be dedicated to DPO requirements and requested the delegation of authority. Appendix 1 is the letter from Major General William H. Johnson announcing the delegation of “head of agency” to the commander of the USTRANSCOM. According to the *FAR*, head of agency or “agency head” means the secretary, attorney general, administrator, governor, chairperson, or other chief official of an executive agency, unless otherwise indicated, including any deputy or assistant chief official of an executive agency (GSA, 2009).

In response to receiving head-of-agency authority, the USTRANSCOM organized its Command Acquisition according to the structure shown in Figure 6.

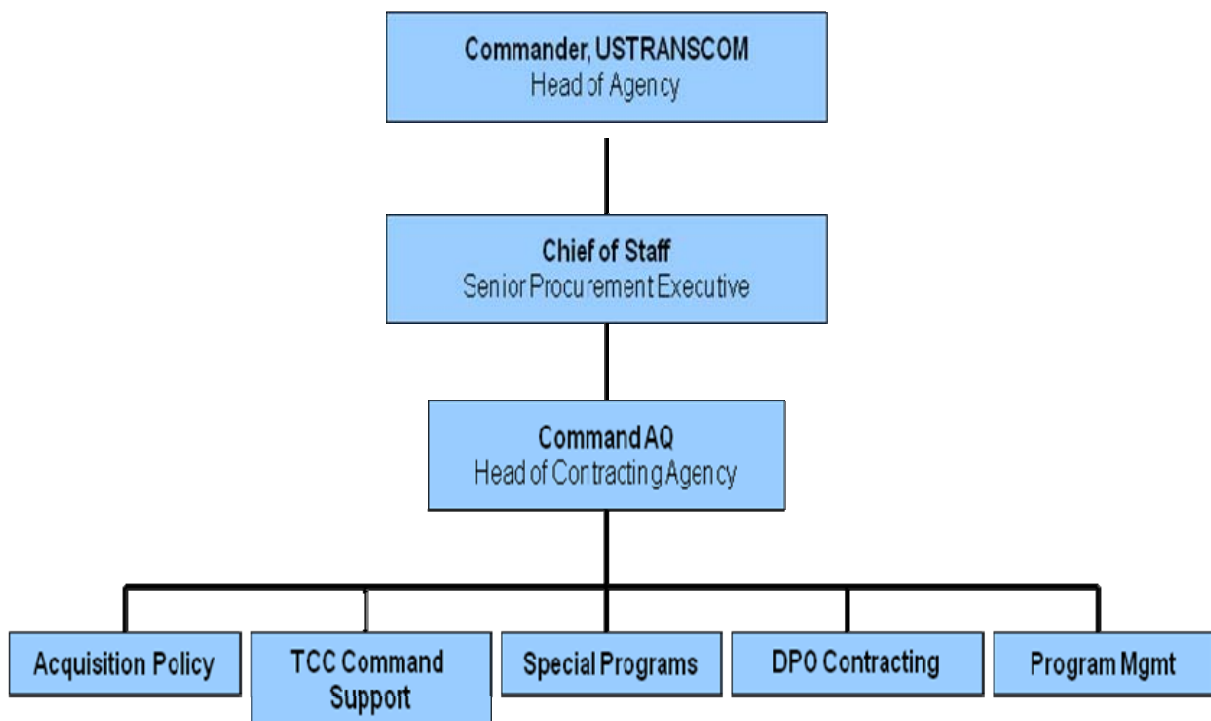


Figure 6. The USTRANSCOM Command Structure (2006)
(From USTRANSCOM, 2009b)



E. USTRANSCOM's Command Acquisition

The USTRANSCOM is organized into 11 entities with all acquisition-related functions falling under Transportation Command Acquisition (TCAQ). TCAQ's mission is to serve as the business advisor to and external liaison with AMC, MSC, SDDC, acquisition components, and other contracting agencies. TCAQ provides expertise on various acquisition policies, procedures, and strategies to DoD organizations, federal agencies, and the commercial transportation industry. TCAQ analyzes and proposes acquisition-related legislative and regulatory changes to increase the effectiveness of the Defense Transportation System (DTS). TCAQ also ensures compliance with these regulations. TCAQ serves as the focal point for the USTRANSCOM acquisition by managing the Command's internal acquisition and contracting process. Additionally, the acquisition chief chairs both the Defense Acquisition Regulation (DAR) Council Transportation Committee and the Acquisition Strategy Review Panel (ASRP) (USTRANSCOM, 2009b).

In 2009, TCAQ changed its organizational structure to include program management. The new structure consists of two major sections and seven divisions that are organized based on their acquisition mission, as shown in Figure 7 (USTRANSCOM, 2009b).



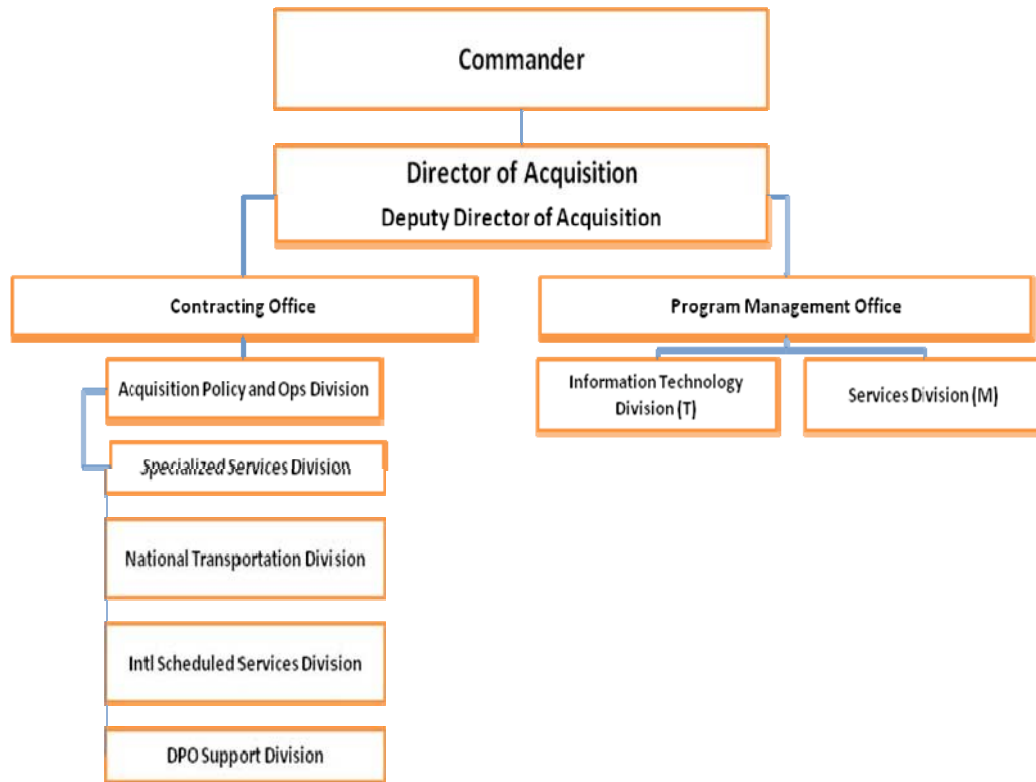


Figure 7. TCAQ Command Structure
(From USTRANSCOM, 2009b)

The contracting section of TCAQ is responsible for contracting oversight and administration of all USTRANSCOM programs.

Acquisition Policy and Ops (TCAQ-P) provides expertise on acquisition policies, procedures, and strategies across the DPO. TCAQ-P ensures the USTRANSCOM maintains the highest ethical procurement standards while achieving global warfighting support.

Specialized Services (TCAQ-S) provides contracting support for the USTRANSCOM's acquisition of both specialized services and Research Development Test and Evaluation (RDT&E).



National Transportation (TCAQ-R) provides responsive acquisition and business advisory support for national and regional transportation programs serving DoD customers worldwide.

International Scheduled Services (TCAQ-I) acts as a business advisor and procurement of international multi-model transportation services in support of the DoD's peace and wartime movement of cargo and passengers worldwide.

DPO Support (TCAQ-D) provides responsive contracting and business advice for USTRANSCOM DPO support services as well as contracting support for SDDC National Level's transportation system requirements.

The program management section of TCAQ is responsible for planning, managing, developing and delivering USTRANSCOM-validated IT and services programs. In addition, the program management section focuses on delivering capabilities to the customers while ensuring programs are executed in accordance with law, regulation, etc.

IT division (TCAQ-T) provides oversight for Command, Control, Communications, Computers, and Surveillance (C4S) programs.

Services division (TCAQ-M) provides expertise on acquisition program management policies, procedures and strategies to the USTRANSCOM Commander, staff and components. In addition, TCAQ-M manages ACAT and high-visibility services programs.

The program management section works closely with the program support branch (TCJ6-P). TCJ6-P is the single point for program resource management. In addition to building and coordinating program budgets, TCJ6-P supports TCAQ-T/M through integrated management plans and ensuring policy compliance. Figure 8 shows the interdependency that exists between TCAQ-T/M and TCJ6-P.



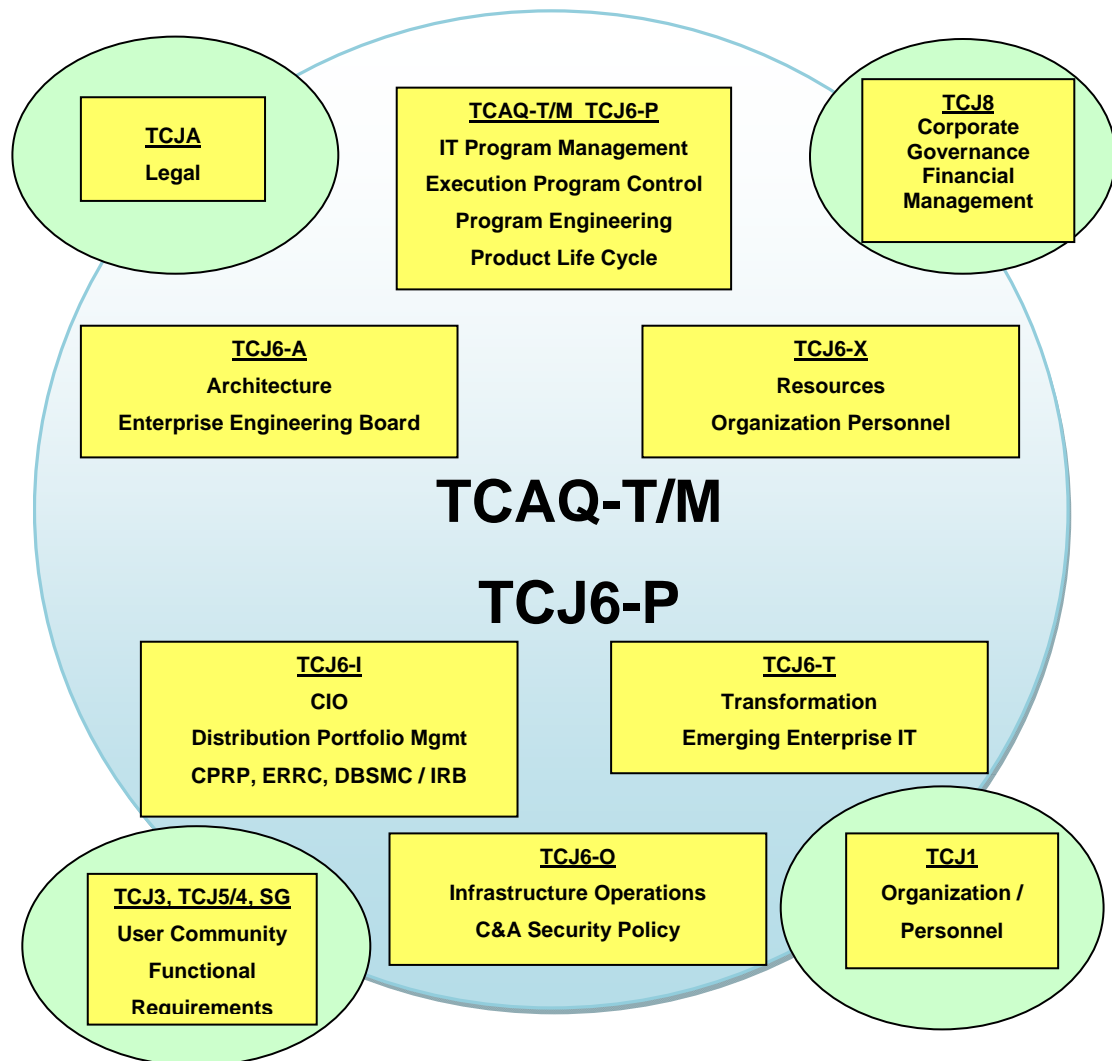


Figure 8. TCAQ Inter-dependency
(From USTRANSCOM, 2009b)

F. Summary

This chapter described the organizational history of the USTRANSCOM, its major components and its Acquisition Command. Furthermore, it explained acquisition authority and the significance of the USTRANSCOM receiving head-of-agency power. Finally, this chapter detailed the USTRANSCOM's Acquisition Command and its major sections. Chapter IV will discuss the results of the web-based survey as well as an analysis based on the *GAO Framework for Assessing the Acquisition Function at Federal Agencies*.



THIS PAGE INTENTIONALLY LEFT BLANK



IV. Analysis of Research

A. Overview

This chapter contains findings from the surveys and semi-structured interviews obtained from TCAQ personnel. The survey and interview questions were designed to provide feedback on the elements of Cornerstone 1 and Cornerstone 2 that are outlined in the *GAO Framework for Assessing the Acquisition Function at Federal Agencies*. As shown in Figure 9, the GAO has assigned critical success factors to each element designed to enable an organization to address specific areas needing improvement. For example, when it comes to alignment of acquisition with an agency’s mission and needs (element), one critical success factor is to ensure that acquisition roles and responsibilities are clearly defined and integrated within the organization.

Cornerstone 1 Elements	Critical Success Factors:
Aligning Acquisition with Agency’s Missions and Needs	<ul style="list-style-type: none"> ▪ Organizing the Acquisition Function to Operate Strategically ▪ Clearly Defining and Integrating Roles and Responsibilities
Commitment from Leadership	<ul style="list-style-type: none"> ▪ Clear, Strong and Ethical Executive Leadership ▪ Effective Communications and Continuous Improvement
Cornerstone 2 Elements	Critical Success Factors:
Effectively Managing the Acquisition Process	<ul style="list-style-type: none"> ▪ Empowering Cross-functional Teams ▪ Managing and Engaging Suppliers ▪ Monitoring and Providing Oversight to Achieve Desired Outcomes ▪ Enabling Financial Accountability

Figure 9. Cornerstone 2 Elements: Critical Success Factors
(From GAO, 2005b)



Figure 10 provides the cornerstone, element, and critical success factor addressed by each survey question.

Question Number:	Cornerstone:	Element:	Critical Success Factor:
1, 27, 37, 50, 57 Total Questions: 5	N/A (Info Gathering)	N/A	N/A
2–7 Total Questions: 6	Organizational Alignment & Leadership	Aligning ACQ with Agency’s Mission and Needs	Organizing the Acquisition Function to Operate Strategically
8–10 Total Questions: 3	Organizational Alignment & Leadership	Aligning ACQ with Agency’s Mission and Needs	Clearly Defining and Integrating Roles and Responsibilities
11–14 Total Questions: 4	Organizational Alignment & Leadership	Commitment from Leadership	Clear, Strong, and Ethical Executive Leadership
15, 16 Total Questions: 2	Organizational Alignment & Leadership	Commitment from Leadership	Effective Communications & Continuous Improvement
17–26 Total Questions: 10	Policies & Processes	Effectively Managing the ACQ Process	Empowering Cross-functional Teams
28–36, 56 Total Questions: 10	Policies & Processes	Effectively Managing the ACQ Process	Managing & Engaging Suppliers
38–49 Total Questions: 12	Policies & Processes	Effectively Managing the ACQ Process	Monitoring and Providing Oversight to Achieve Desired Outcomes
51–55 Total Questions: 5	Policies & Processes	Effectively Managing the ACQ Process	Enabling Financial Accountability

Figure 10. Survey Question Details by Corresponding Element & Critical Success Factor

Semi-structured interviews were also conducted with TCAQ personnel. The information gathered from the interviews was used to provide backup data to the survey results and also provided more depth in certain areas that the survey could not address.



B. Setup, Demographics, and Analysis Methodology

The survey statements were derived from the *GAO Framework for Assessing the Acquisition Function at Federal Agencies*. It was then fielded utilizing an internet company that specializes in web-based surveys—www.surveymonkey.com. The survey was available to TCAQ personnel from August 1, 2009, through August 31, 2009. Survey-takers were sent an e-mail from Ms. Gail Jorgenson (Deputy Director TCAQ) that provided an internet hyperlink to the survey. Upon opening the hyperlink, respondents were required to view and accept an informed consent form. The consent form outlined the procedures, risks, benefits, compensation, confidentiality and privacy, voluntary nature of the study, points of contact, and statement of consent of the survey.

The demographics included 19 survey responses out of 40 personnel that received the survey, resulting in a 47.5% response rate. Of the survey responses, 58.3% of respondents were most closely associated with program management. Next, 33.3% of respondents were most closely associated with contracting. Then, 4.2% of respondents were most closely associated with finance. Finally, 4.2% fell into the “other” category. The one person that fell in the “other” category works in a computer support function. For this research project, all survey responses were assessed collectively; answers to the survey questions were not broken down by job function.

The survey results that follow are based on a majority percentage method in which it was determined if the overall majority at least “agree” (“definitely agree” or “agree”) versus at least “disagree” (“definitely disagree” or “disagree”). However, if the majority percentage of survey responses fell under the “neither” category, then the results were determined to be “inconclusive.” Based on this methodology, each survey question was analyzed to determine the majority proportion of responses. Using the *GAO Framework* as a guide to identify potential areas of caution, our research will utilize the terms “negative response” or “positive response.” Depending on the structure of the survey question, it was determined whether “agree” or



“disagree” constituted a negative or positive response. The largest proportion of summed responses determined whether the overall response to a question was positive, negative, or inconclusive. For example, if it was determined that “definitely disagree” and “disagree” constituted a negative response, then the sum of the responses for “definitely disagree” and “disagree” were proportionally greater compared to the number of responses for “neither” and the sum of the responses for “definitely agree” and “agree.” For a statement with a majority of negative responses, this was considered an area of concern and cautions were provided, as outlined in the *GAO Framework*.

The results that follow will first address the elements and critical success factors within Cornerstone 1 of the *GAO Framework*, Organizational Alignment and Leadership. Next, elements and critical success factors for Cornerstone 2, Policies and Processes, will be addressed.

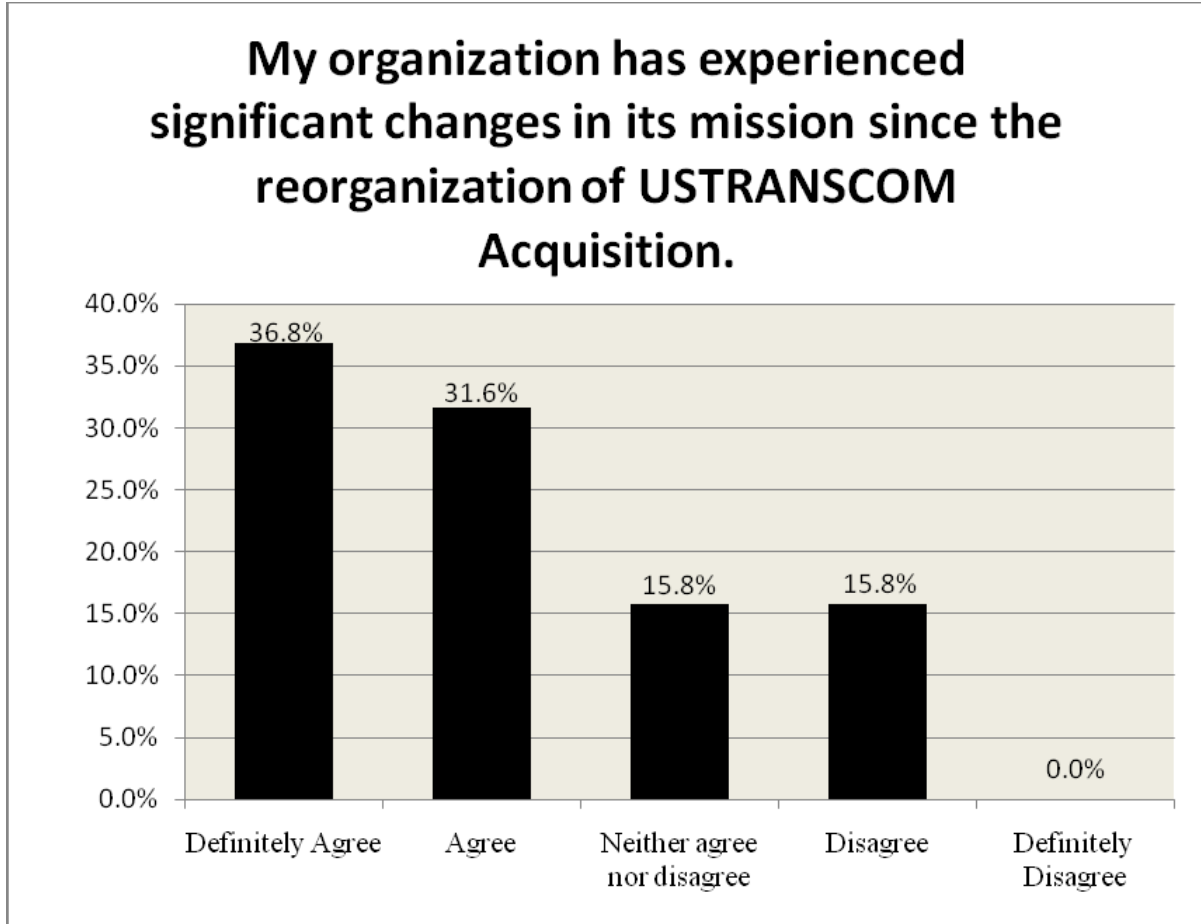
C. Cornerstone 1 Results

1. **Organizing the Acquisition Function to Operate Strategically**

The element Aligning Acquisition with the Agencies Mission and Needs was addressed early in the survey by questions 2–7. This element is extremely appropriate considering the recent reorganization of TCAQ in order to better align its program management function. The critical success factor that applies to this element is Organizing the Acquisition Function to Operate Strategically. In order to capture the effects of the reorganization, the survey began by collecting information related to recent changes experienced by TCAQ personnel. Survey question 2 states: “My organization has experienced significant changes in its mission, since the reorganization of USTRANSCOM Acquisition.” The overall responses to this question are shown in Table 2.



Table 2. Results of Survey Question 2

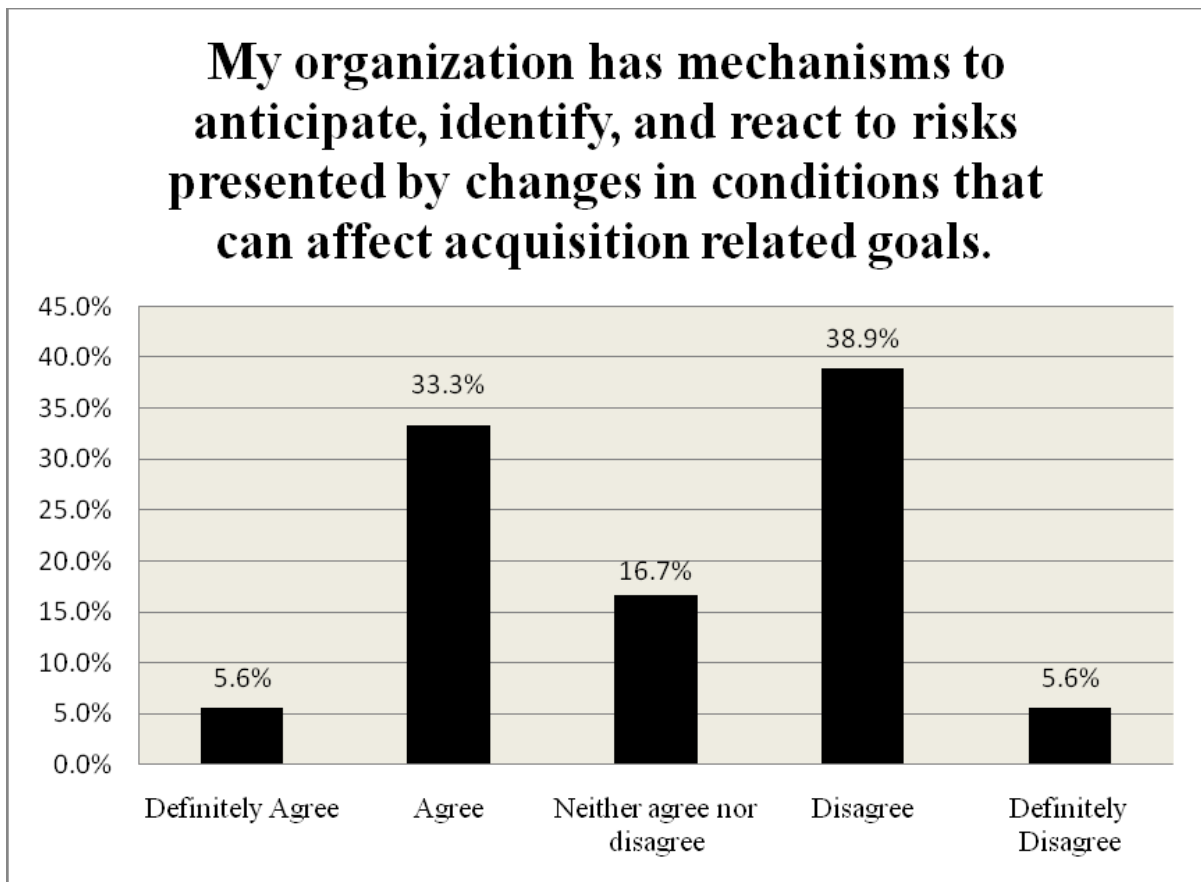


According to TCAQ personnel, 68.4% definitely agreed or agreed that the organization had experienced significant changes to its mission since the reorganization while 15.8% disagreed. Survey question 3 addressed changes to TCAQ’s budget. A majority of personnel neither agreed nor disagreed that there have been significant changes to the budget; and consequently, the results for this question were inconclusive. One feedback comment that helps explain this response is, “There have been budget perturbations, but only changes in ownership, not major changes in amounts for most programs.” Survey questions 4 and 5 asked TCAQ personnel to rate change with a focus on workforce and technology, respectively. Similar to question 2, a majority of personnel reported that significant change had occurred with respect to these areas.



Questions 6 and 7 addressed the mechanisms and metrics established by the organization in response to changing conditions. Question 6 states: “My organization has mechanisms to anticipate, identify, and react to risks presented by changes in conditions that can affect acquisition related goals.” The overall responses to this question are shown in Table 3.

Table 3. Results of Survey Question 6



As shown in Table 3, there was a negative response to question 6 with 44.5% of TCAQ personnel disagreeing that the organization has mechanisms in place to anticipate, identify and react to risks presented by changes in conditions while 38.9% definitely agreed or agreed. Survey question 7 stated “My organization has metrics related to acquisition efficiency, effectiveness, and results that are included as part of overall performance plan and communicated regularly to senior leaders

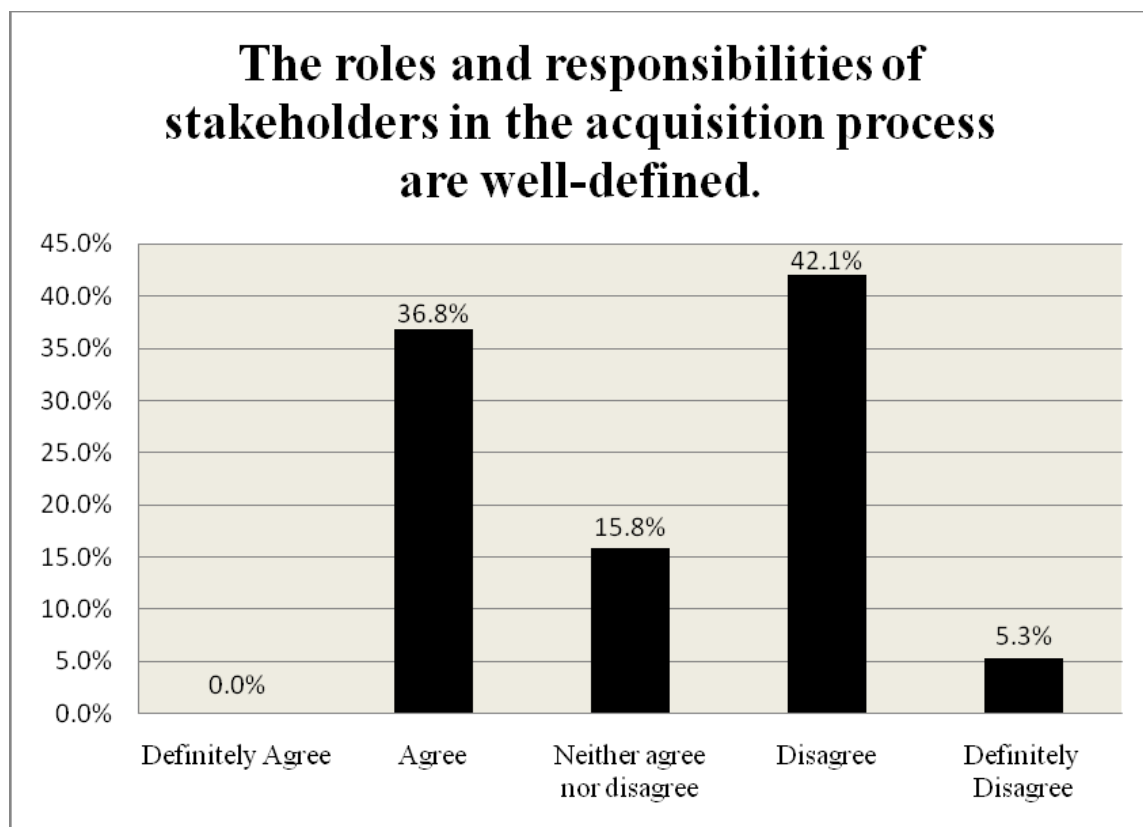


and management.” The responses to this question were also negative. Similar to the responses to survey question 6, 44.5% of personnel disagreed that the organization has metrics in place that are communicated regularly to senior leaders and management.

2. Clearly Defining and Integrating Roles and Responsibilities

Survey questions 8–10 apply to the same element as questions 2–7; however, they address the critical success factor of Clearly Defining and Integrating Roles and Responsibilities. Survey question 8 states: “The roles and responsibilities of stakeholders in the acquisition process are well-defined.” For this question, “stakeholders” includes TCAQ acquisition personnel, end users and service/IT contractors. The overall responses to this question are shown in Table 4.

Table 4. Results of Survey Question 8



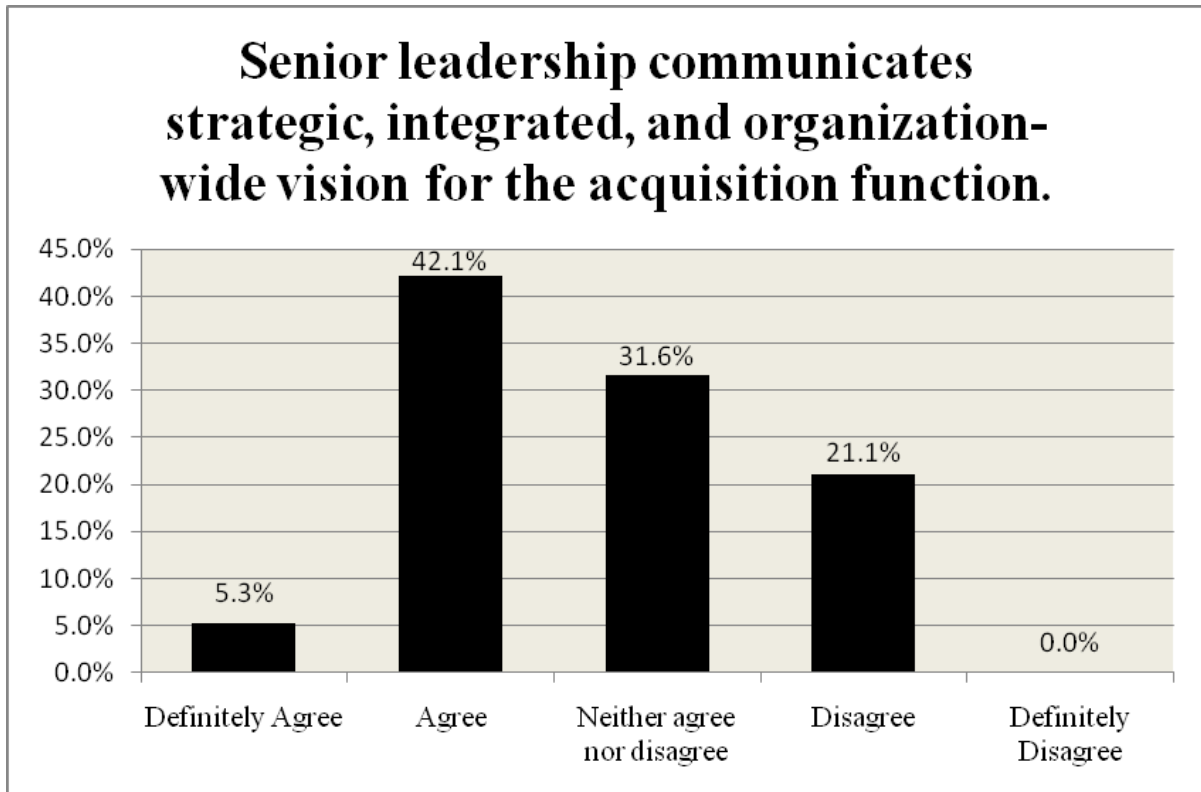
As shown in Table 4, there was a negative overall response to this question with 47.4% of TCAQ personnel disagreeing that the roles and responsibilities of stakeholders are well defined while 36.8% agreed. The *GAO Framework* cautions organizations when the acquisition stakeholder's roles are unclear. When it comes to stakeholders, one survey respondent offered feedback that shed some light on well-defined roles and responsibilities: "USTRANSCOM has regulations/instructions that have conflicting guidance regarding roles and responsibilities of stakeholders in the acquisition process." Survey question 9 addressed leadership empowering stakeholders in the acquisition function. The results for this survey question were inconclusive with 42.1% of responses as neither agree nor disagree. Finally, survey question 10 asked if stakeholders are held accountable for their actions. The majority of TCAQ personnel agreed that leadership does hold stakeholders accountable for their actions.

3. Clear, Strong, and Ethical Executive Leadership

The next critical success factor addressed by the survey is Clear, Strong and Ethical Executive Leadership. Survey question 11 states: "Senior leadership communicates strategic, integrated, and organization-wide vision for the acquisition function." The overall responses to survey question 11 are shown in Table 5.



Table 5. Results of Survey Question 11



As shown in Table 5, there was a positive overall response to this question with 47.4% of TCAQ personnel agreeing that senior leadership communicates strategic, integrated, and organization-wide vision for the acquisition function while 21.1% disagreed. Similarly, survey question 12 asked TCAQ personnel if they felt that leadership effectively communicates the organization’s missions, values, and guiding principles to the workforce. The total positive response was 42.1% definitely agree and agree while 21.1% definitely disagree and disagree. Interviews with TCAQ personnel highlighted the benefits of organization-wide “Director’s Calls” that allowed leadership an opportunity to directly communicate their vision to the workforce. Survey question 13 received a high positive rating by TCAQ personnel in response to: “I feel leadership and management has a positive and supportive attitude toward the organization’s workforce.” The total positive response was 63.1% definitely agree and agree while only 10.6% definitely disagree and disagree. The final survey question in this section asked if managers at all levels are held



accountable for their contribution to the acquisition process. Like survey question 13, question 14 received a positive response from TCAQ personnel. The total positive response was 68.5% definitely agree and agree while only 26.4% definitely disagree and disagree.

4. Effective Communications and Continuous Improvement

Survey questions 15 and 16 were utilized to examine the critical success factor of “Effective Communications and Continuous Improvement.” While leadership had positive ratings for its ability to communicate the organization’s mission and its vision, this section highlighted a negative trend with regard to two-way communication. Survey question 15 states: “I have been asked for my view on the effectiveness of this (organization’s) communication.” The total negative response was 42.1% definitely disagree and disagree while 26.3% definitely agree and agree. One comment from the survey stated, “Senior leadership does not communicate with support personnel.” Likewise, 42.1% of TCAQ personnel definitely disagree and disagree that stakeholders have been asked for their views on the effectiveness of the existing acquisition process and areas needing improvement while 31.6% agreed. Interviews with TCAQ personnel revealed a concern that leadership does not value the workforce’s opinion about the effectiveness of—and ways to improve—the existing acquisition process.

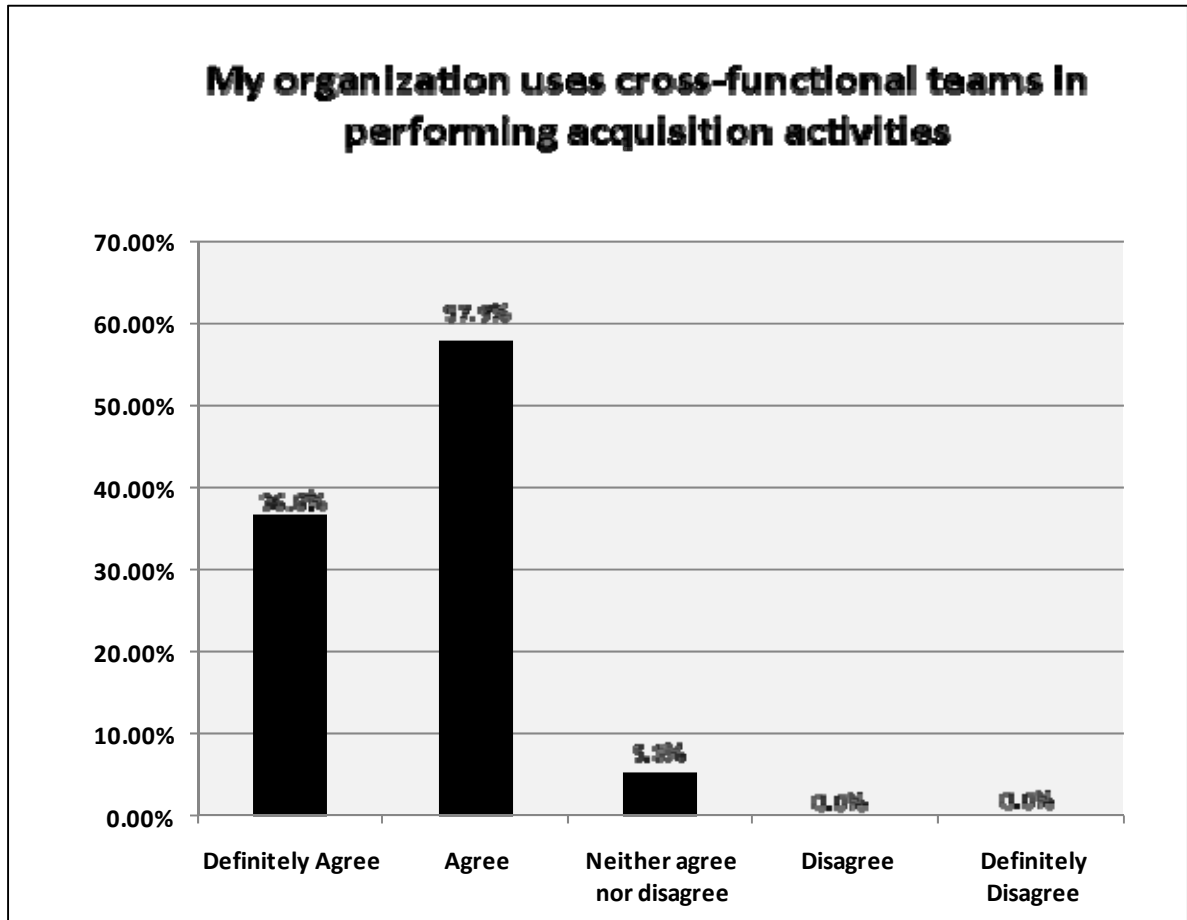
D. Cornerstone 2 Results

1. Empowering Cross-functional Teams

Cornerstone 2 of the *Framework* discusses Policies and Processes. The first critical success factor under this cornerstone is “Empowering Cross-functional Teams,” which is addressed in survey questions 17–26. TCAQ personnel were asked the following survey question: My organization uses cross-functional teams in performing acquisition activities. The results of this survey question are shown in Table 6.



Table 6. Results of Survey Question 17



As shown in Table 6, there was a high, positive overall response to this question, with 94.7% of TCAQ personnel agreeing that their organization uses cross-functional teams while 0% disagreed. The *Framework* comments that most leading organizations make extensive use of cross-functional teams in order to make sure they have the right mix of knowledge, technical expertise and credibility. The majority of TCAQ personnel agreed that they felt empowered to make decisions about a program's outcomes. This is a positive sign according to the *Framework*, which encourages organizations to empower their workforce to make decisions and become invested in a project's outcome. Survey questions 19–22 all asked TCAQ personnel about the use of project plans and performance measurement baselines to manage cost, schedule, risks and major milestones. Each question had a positive



response. Survey question 23 asked TCAQ personnel if they involved individuals outside of the project team to regularly review the status of cost, schedule and performance goals. There was a positive overall response to this question with 47.3% of TCAQ personnel agreeing that they involve individuals outside of the project team in reviewing project goals while 21.1% disagreed. Survey question 24 produced an interesting response, as shown in Table 7.

Table 7. Results of Survey Question 24



As shown in Table 7, there was a negative overall response to this question with 36.9% of TCAQ personnel disagreeing that there are incentives in place to encourage their team to meet project goals while 26.3% agreed. Interviews with TCAQ personnel revealed that while there was continuous pressure from leadership to meet project goals, there were very few incentives to reward hard work. One interviewee stated “it’s an incentive to keep your feet out of the fire.” The *Framework* cautions organizations that fail to use good project management techniques, which includes providing incentives to meet project goals. This section of questions



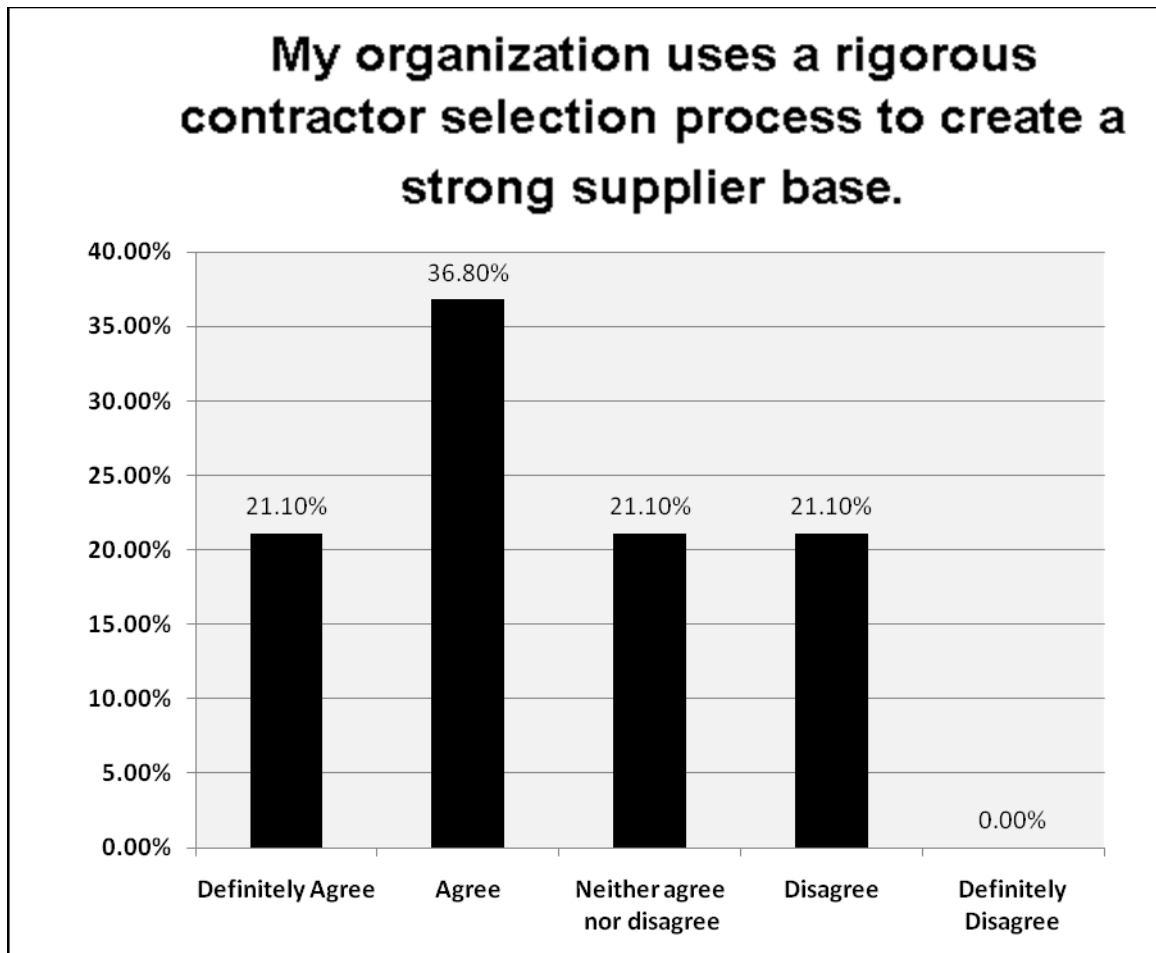
concluded on a positive trend with TCAQ personnel agreeing with survey questions 25 and 26. Survey question 25 asked if teams were held accountable for meeting cost, schedule, and performance goals to which 63.2% agreed. Survey question 26 discussed if there was open, honest, and clear communication among all the project stakeholders. Over 80% of survey-takers agreed that this type of communication existed among all of the project stakeholders.

2. Managing and Engaging Suppliers

The second critical success factor is Managing and Engaging Suppliers, which is addressed in survey questions 28–36. According to the *Framework*, leading organizations have found that more cooperative business relationships with suppliers have improved their ability to respond to changing business conditions (GAO, 2005b, p. 17). Survey question 28 opens this section by asking whether survey-takers agreed with this statement: “My organization has a process to identify key contractors and subcontractors.” The majority of survey-takers agreed that TCAQ does have processes in place. Survey question 29 goes deeper into this subject. It reads: “My organization uses a rigorous contractor selection process to create a strong supplier base.” The results of this question are shown in Table 8.



Table 8. Results of Survey Question 29



As shown in Table 8, there was a positive overall response to this question with 57.9% of TCAQ personnel agreeing that TCAQ uses a rigorous contractor selection process while 21.1% disagreed. The *Framework* highlights the importance of using stringent supplier-selection criteria while maintaining competition among suppliers. Survey questions 30 through 33 touch on the subject of utilizing strategic purchasing managers for key goods and services. The results of these questions all fell within the “neither” category and are therefore reported as inconclusive. Interviews with TCAQ personnel shed some light on these results by explaining that they currently don’t have the manpower to have dedicated strategic purchasing managers. Survey question 34 asks if TCAQ provides training to its acquisition workforce on how to manage supplier relationships. The majority of survey-takers



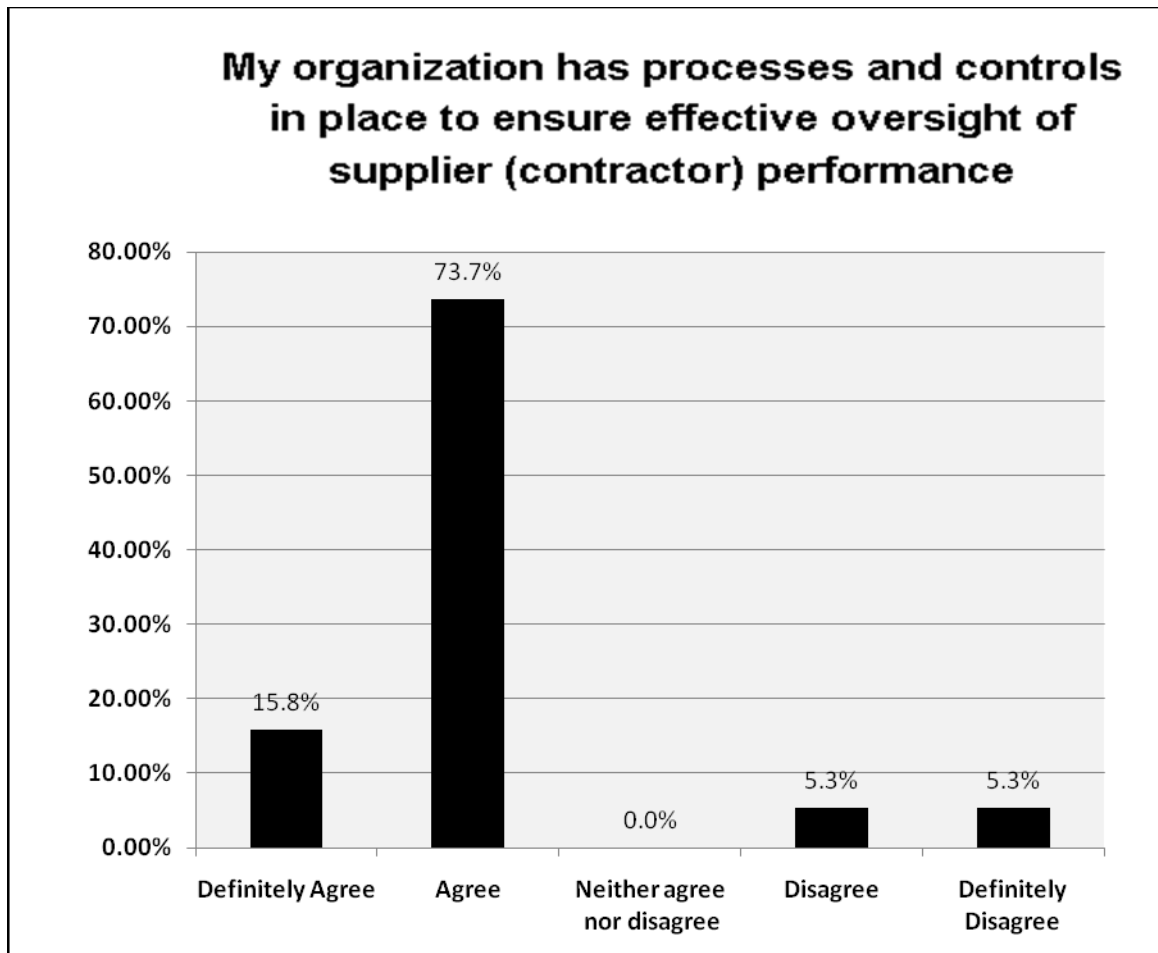
agreed that there was training available on this subject. The next question discusses if the organization has an established and effective feedback system with its suppliers. There was a positive overall response to this question with 57.9% of TCAQ personnel agreed that a supplier feedback system was in place while 5.3% disagreed. The *Framework* highlights many types of feedback systems available to organizations such as providing periodic “report cards” and meeting formally with key suppliers to discuss issues; the *Framework* also suggests using surveys, supplier meetings, and formal agency-supplier councils or supplier advisory councils to assess existing customer-supplier working arrangements, identify problem areas, and report back to suppliers (GAO, 2005b, p. 18). The final question in this section asked: “My organization fosters an environment in which its suppliers (contractors) invest their intellectual capital—their ideas—into the venture.” Survey-takers agreed with this statement and commented that there was a strong partnership relationship between the organization and its suppliers.

3. Monitoring and Providing Oversight to Achieve Desired Outcomes

Survey questions 38 through 49 address the third critical success factor of Monitoring and Providing Oversight to Achieve Desired Outcomes. The *Framework* discusses the recent trend of the government’s increased use of contractors to carry out its mission. As a result, organizations require effective oversight processes and staff with the right skills and training to ensure contractors provide the needed goods and services. The majority of TCAQ personnel agreed with survey question 38, which asked: “My organization tracks the type of acquisition methods used for acquiring goods and services to assess workload and training requirements.” This is an important area of concern due to the manpower constants that currently exist within TCAQ. Survey question 39 states, “My organization has processes and controls in place to ensure effective oversight of supplier performance.” The results of this question are shown in Table 9.



Table 9. Results of Survey Question 39

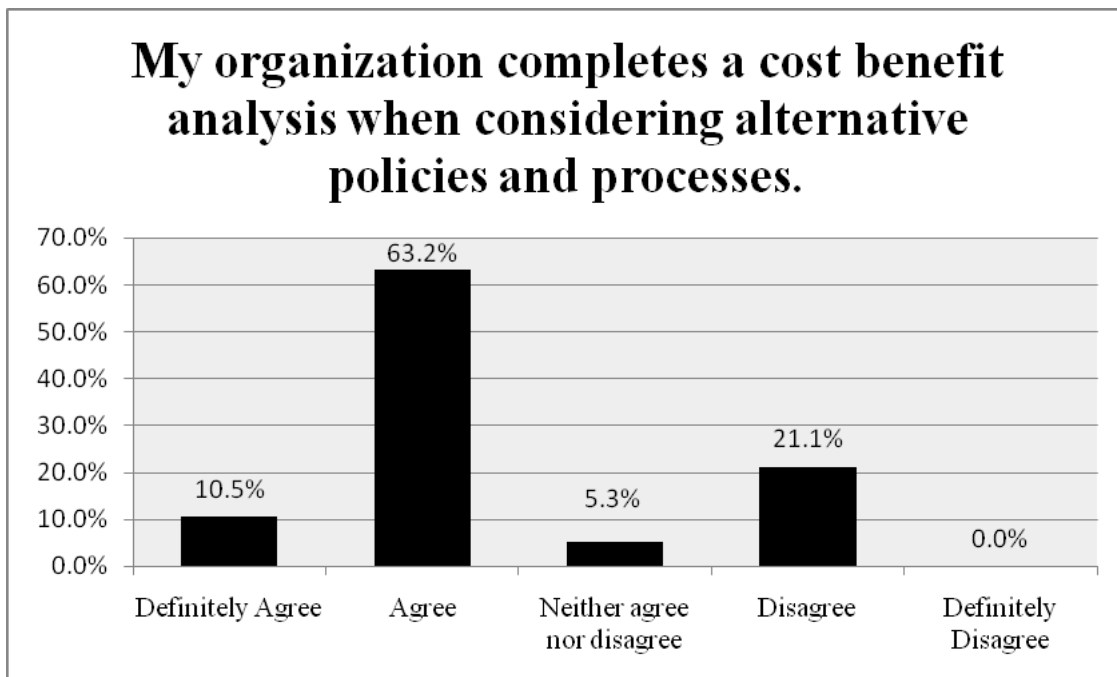


As shown in Table 9, there was a high, positive overall response to this question with 89.5% of TCAQ personnel agreeing that there are processes in place to ensure oversight of supplier performance while 10.6% disagreed. Likewise, there was a high, positive overall response to survey question 40, which asked if the organization clearly defined the roles and responsibilities of those who perform contract management and oversight. Training is a force multiplier in the fight to oversee suppliers' performance. Survey questions 41 and 42 ask if the organization has taken actions to ensure that it has the adequate staff with the right training to oversee suppliers and the overall acquisition process. Over 60% of survey-takers agreed that the organization had provided the right people with the right training and 52.7% agreed that people had the appropriate skills to monitor the acquisition



process on a continuous basis. Survey question 43 discusses the use of earned value-management (EVM) within TCAQ. The results of this question were inconclusive with 52.6% answering neither agree nor disagree. However, one comment from the interviews stated that “our organization avoids EVM.” The *Framework* cautions when earned-value data are unavailable or unreliable, and earned-value management principles are not properly implemented. The next survey question in this section asks if the organization monitors the effectiveness of the acquisition policies and processes. There was a positive overall response to this question with 57.9% of survey-takers agreeing that TCAQ does monitor the effectiveness of acquisition policies and processes while 21.1% disagreed. The *Framework* suggests that organizations complete a cost-benefit analysis when considering alternative policies and processes and follow up on findings identified in monitoring efforts (GAO, 2005b, p. 20). Survey question 45 states: “My organization completes a cost benefit analysis when considering alternative policies and processes.” The results of question 45 are shown in Table 10.

Table 10. Results of Survey Question 45



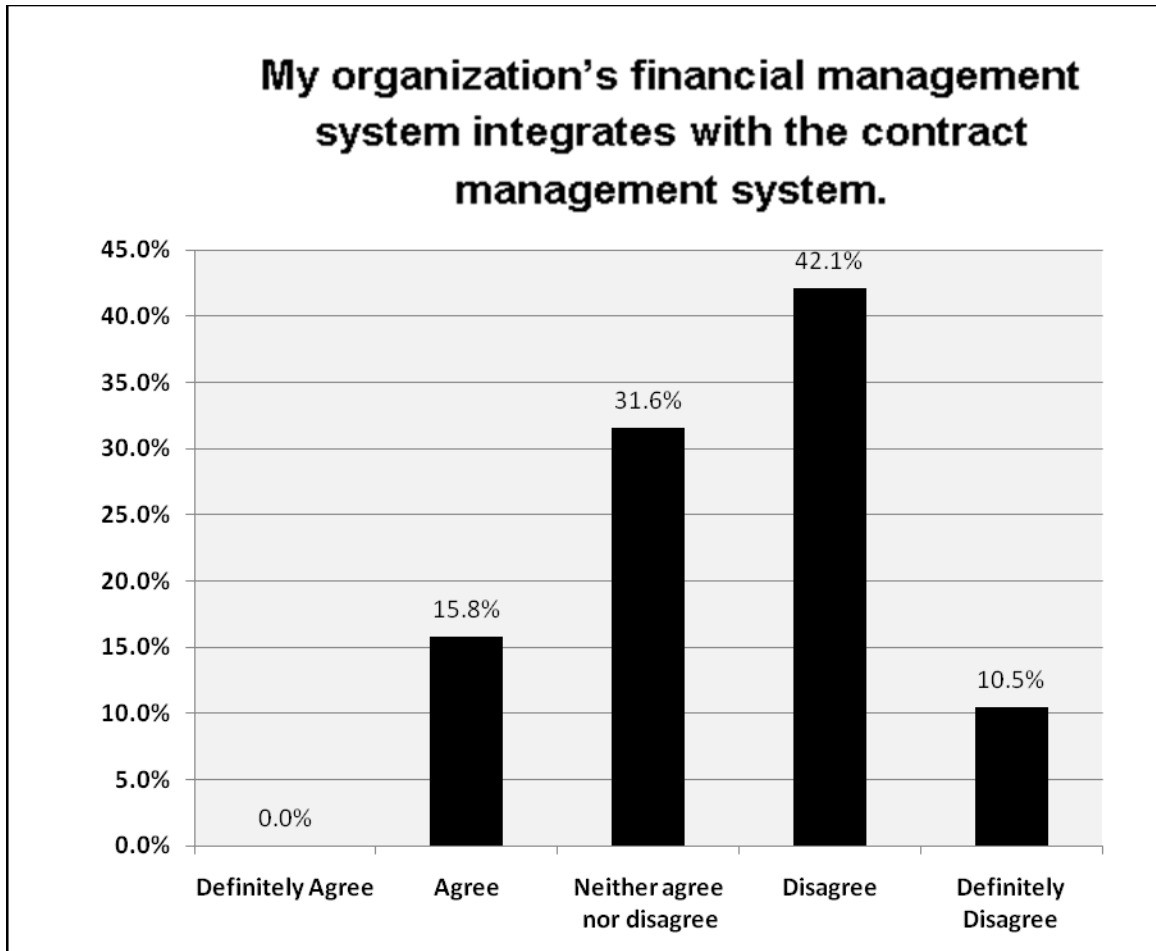
There was a positive overall response to this question with 73.7% of survey-takers agreeing that TCAQ does use cost-benefit analysis while 21.1% disagreed. Survey questions 46 through 49 asked TCAQ personnel if a significant (>50%) number of contracts fail to meet cost, schedule, performance or quality requirements. The *Framework* cautions against organizations that do not monitor whether their contracts meet cost, schedule, performance, and quality requirements. According to survey-takers, TCAQ does monitor these requirements and does not have a significant number of contracts fail to meet cost, schedule, performance or quality requirements, which is a positive trend.

4. Enabling Financial Accountability

The final critical success factor is Enabling Financial Accountability. Survey questions 51–56 cover this section. The *GAO Framework* suggests, throughout the acquisition process, financial information should be tracked and communicated in a way that enables effective evaluation and assessment of acquisition activities. When financial data are not useful, relevant, timely, or reliable, the acquisition function—as well as other functions across an organization—are at risk of inefficient or wasteful business practices (GAO, 2005b, p. 20). Survey question 51 states: “Our acquisition force has access to, and uses, timely contractual financial information to monitor and oversee individual acquisitions.” Over 50% of survey-takers agreed with this statement. There was an interesting result from survey question 52, which stated: “My organization’s financial management system integrates with the contract management system.” Table 11 shows the responses of the survey-takers.



Table 11. Results of Survey Question 52



As shown in Table 11, there was a negative overall response to this question with 52.6% of TCAQ personnel disagreeing that the financial management system integrates with the contract management system while 15.8% agreed. Moreover, one interviewee stated, “it takes alot [*sic*] of different systems to track financial data which makes the job time consuming.” Survey question 53 continues on the subject of how well the TCAQ financial system integrates with their acquisition process. Survey-takers were asked if they agreed that the financial system reports frequently enough to provide reasonable assurance of accountability. There was a slight positive response to this survey question with 36.8% agreeing and 31.6% disagreeing. Survey-takers agreed that financial data resulting from new contracts, task orders and contract modifications are clear and recorded properly. There was



an inconclusive response to survey question 55, which asked: “My organization measures how often erroneous or improper payments are made.” Over 50% responded that they neither agreed nor disagreed with this statement. However, one comment that was made during the interviews stated, “Contract administration suffers from inadequate staffing levels, lack of 1102 experience, and competing priorities.” The *GAO Framework* cautions organizations against inadequate transaction processing, particularly improper payments from occurring.. The final survey question in this section asks if the survey-takers agreed that the organization takes appropriate corrective action when the contractor is not meeting expectations for cost, schedule or performance. The results of this question are shown in Table 12.

Table 12. Results of Survey Question 56



As shown in Table 12, there was a positive overall response to this question with 57.9% of survey-takers agreeing that TCAQ takes appropriate corrective action when the contractor is not meeting expectations for cost, schedule or performance while 10.5% disagreed. Taking appropriate corrective action when the contractor is not meeting contract requirements is an important step to ensure that TCAQ is maximizing the limited budgets of its customers. The next section will provide analysis of the results from the survey given to TCAQ personnel.

E. Analysis of Results

The analysis of results will be divided into three elements: Aligning Acquisition with Agency’s Mission and Needs, Commitment from Leadership, and Effectively Managing the Acquisition Process. Each element is integral to effective stewardship at an organization and depends on critical success factors. The presence of critical success factors—which focus on program results and mission accomplishment—can enhance the likelihood of consistently achieving desired acquisition outcomes. Conversely, the absence of these critical success factors can point to areas embodying high degrees of risk or those needing greater attention from leadership (GAO, 2005b, p. ix).

1. **Aligning Acquisition with Agency’s Mission and Needs**

The element Aligning Acquisition with the Agency’s Mission and Needs was addressed in the survey by questions 2–10. The critical success factors for this element were: Organizing the Acquisition Function to Operate Strategically and Clearly Defining and Integrating Roles and Responsibilities.



a. Organizing the Acquisition Function to Operate Strategically

There was a positive response from survey-takers, recognizing that changes in mission, workforce and technology had occurred. The results were inconclusive on budget changes; however, one feedback comment that helps explain this response was the following: “There have been budget perturbations, but only changes in ownership, not major changes in amounts for most programs.”

Two areas of concern revealed from the survey were the lack of metrics related to acquisition effectiveness and the absence of mechanisms to anticipate, identify, and react to changes that affect acquisition goals. According to the GAO in their 2009 study *Defense Acquisitions Measuring the Value of DOD's Weapon Programs Requires Starting with Realistic Baselines*, “Program outcome metrics—quantitative measures of cost, schedule, and performance over time—provide useful indicators of the health of acquisition programs and whether they are meeting their intended goals” (GAO, 2009b, p. 1).

Without effective metrics and mechanisms, an organization is forced to plan at the tactical level and react to changes as they occur. This tactical planning is inconsistent with the first critical success factor, Organizing the Acquisition Function to Operate Strategically, and indicates an area needing greater attention from leadership.

b. Clearly Defining and Integrating Roles and Responsibilities

Likewise, the survey results indicate inconsistency with respect to the second critical success factor, Clearly Defining and Integrating Roles and Responsibilities. An area of concern was the negative response to the roles and responsibilities of stakeholders being well defined, while there was a positive response to stakeholders



being held accountable for their actions. One survey feedback write-up that shed some light on this subject was the following: “USTRANSCOM has regulations/instructions that have conflicting guidance regarding roles and responsibilities of stakeholders in the acquisition process.” These results highlight a potential area of concern when stakeholders are held responsible for their actions yet their roles and responsibilities are not clear.

2. Commitment from Leadership

The element Commitment from Leadership was addressed in the survey by questions 11–16. The critical success factors for this element were Clear, Strong, and Ethical Executive Leadership and Effective Communications and Continuous Improvement.

a. *Clear, Strong and Ethical Executive Leadership*

There was a positive response to leadership communicating strategic, integrated, and organization-wide vision, mission, values, and guiding principles. Survey-takers also agreed that leadership has a positive and supporting attitude toward the organization’s workforce. Interviews with TCAQ personnel highlighted the benefits of organization-wide “Director’s Calls” that allowed leadership an opportunity to directly communicate their vision to the workforce. These positive responses indicate actions that are consistent with the critical success factor, Clear, Strong, and Ethical Executive Leadership.

b. *Effective Communications and Continuous Improvement*

However, while leadership had positive ratings for their ability to communicate the organization’s mission and its vision, this section also highlighted a negative trend with regard to two-way communication. One comment from the survey stated, “Senior leadership does not communicate with support personnel.” Interviews with TCAQ personnel also revealed a concern that leadership does not value the workforce’s opinion about the effectiveness of—and ways to improve—the existing



acquisition process. These results indicate an area of concern and are inconsistent with respect to the second critical success factor, Effective Communications and Continuous Improvement.

3. Effectively Managing the Acquisition Process

The element Effectively Managing the Acquisition Process was addressed in the survey by questions 17–56. The critical success factors for this element were: Empowering Cross-functional Teams, Managing and Engaging Suppliers, Monitoring and Providing Oversight to Achieve Desired Outcomes, and Enabling Financial Accountability.

a. Empowering Cross-functional Teams

The first critical success factor we will address is, Empowering Cross-functional Teams. The *GAO Framework* comments that most leading organizations make extensive use of cross-functional teams in order to make sure they have the right mix of knowledge, technical expertise and credibility (GAO, 2005b, p. 16). There were positive responses to survey questions regarding the use of cross-functional teams.

In addition, survey-takers agreed that they felt empowered by leaders to make decisions about their programs. This is a positive sign according to the *Framework*, which encourages organizations to empower their workforce to make decisions and become invested in a project's outcome.

However, there was a negative response to the survey question regarding incentives in place to encourage teams to meet project goals. Interviews with TCAQ personnel revealed that while there was continuous pressure from leadership to meet project goals there were very few incentives to reward hard work. One interviewee stated, “it’s an incentive to keep your feet out of the fire.” The *Framework* cautions organizations that fail to use good project management techniques, which includes providing incentives to meet project goals. The overall



responses indicate practices that are consistent with the critical success factor, Empowering Cross-functional Teams but also identify incentives as an area needing greater attention from leadership.

b. Managing and Engaging Suppliers

According to the *GAO Framework*, leading organizations have found that more cooperative business relationships with suppliers have improved their ability to respond to changing business conditions (GAO, 2005b, p. 17). The survey results indicated a positive response to TCAQ using a process to identify key suppliers as well as providing training on managing supplier relationships.

Furthermore, the *GAO Framework* highlights many types of feedback systems available to organizations such as meeting formally with key suppliers to discuss issues or supplier advisory councils to assess existing customer-supplier working arrangements, identify problem areas, and report back to suppliers (GAO, 2005b, p. 18). Respondents also had a positive response to survey questions about the effectiveness of TCAQ's use of supplier feedback systems. These positive responses indicate actions that are consistent with the critical success factor Managing and Engaging Suppliers.

c. Monitoring and Providing Oversight to Achieve Desired Outcomes

The *GAO Framework* discusses the recent trend of the government's increased use of contractors to carry out its mission (GAO, 2005b, p. 19). As a result, organizations require effective oversight processes and staff with the right skills and training to ensure contractors provide the needed goods and services. This is an important area of interest because of the manpower constants that currently exist within TCAQ. Survey-takers had a positive response that TCAQ has processes and controls in place to ensure effective oversight of supplier performance. There were also positive responses to survey questions on the



oversight of supplier performance and a clear understanding of the roles and responsibilities of contract management.

The *GAO Framework* suggests that organizations complete a cost-benefit analysis when considering alternative policies and processes and follow up on findings identified in monitoring efforts (GAO, 2005b, p. 20). Respondents agreed that TCAQ utilized cost-benefit analysis in addition to monitoring whether its contracts meet cost, schedule, performance, and quality requirements.

Finally, the *GAO Framework* also highlights that an organization's suppliers should have established earned-value management (EVM) systems, and that the organization verifies that it and its suppliers effectively implement earned-value management processes and procedures on all applicable programs. Survey-takers responses were inconclusive when asked about the use of EVM. Further research determined that TCAQ only had one program that utilized EVM with two more starting within the next year. The lack of programs that were applicable to EVM explains why survey-takers' responses were inconclusive. The overall positive responses indicate practices that are consistent with the critical success factor Monitoring and Providing Oversight to Achieve Desired Outcomes.

d. Enabling Financial Accountability

The *GAO Framework* states, "throughout the acquisition process, financial information should be tracked and communicated in a way that enables effective evaluation and assessment of acquisition activities. When financial data are not useful, relevant, timely, or reliable, the acquisition function—as well as other functions across an organization—are at risk of inefficient or wasteful business practices" (GAO, 2005b, p. 20).



The responses were positive that personnel had access to timely contractual and financial information. On the other hand, there was a negative response to the financial system integrating with contract management system. One interviewee stated, “It takes a lot of different systems to track financial data which makes the job time consuming.”

The results were inconclusive on measuring how often erroneous or improper payments are made. However, one comment that was made during the interviews indicated “Contract administration suffers from inadequate staffing levels, lack of 1102 experience, and competing priorities.” The *GAO Framework* cautions organizations to be aware if inadequate transaction processing, particularly improper payments, occur frequently. In addition, taking appropriate corrective action when the contractor is not meeting contract requirements is an important step to ensure that TCAQ is maximizing the limited budgets of its customers. These overall responses in this section are consistent with respect to the critical success factor Enabling Financial Accountability.

F. Recommendations

The recommendations in this section are based on the web-based survey and semi-structured interviews with TCAQ personnel.

- The initial recommendation is to continue the use of cross-functional teams to maintain the collaborative environment within the organization.
- We recommend the continued use of “Director’s Calls” and suggest the implementation of feedback systems to allow TCAQ personnel to voice their concerns about the effectiveness of acquisition processes and areas of improvement.
- We recommend reevaluating the efficacy of current metrics and mechanisms as well as the In-process Review (IPR) meetings with leadership to assess their results.



- We recommend that TCAQ establish an intern program to train entry-level project managers, including tiered succession planning for future program manager positions. Additionally, we recommend TCAQ investigate funding advanced academic degree positions in their organization that encourages acquisition officers from all Services to attend NPS for an acquisition degree. In return, these officers could be assigned to a three-year acquisition tour with the USTRANSCOM, which would create a flow of advanced-education military project managers for TCAQ, including the opportunity to satisfy their joint-service requirement.

The final recommendation relates to an area of concern voiced during our semi-structured interviews. All 11 interviews had one common theme related to a lack of staffing. Program managers commented that the lack of staffing forces them to prioritize which of the required tasks could be accomplished. When asked what changes in the external environment appear to be having the greatest impact on the organization, one program manager said, “The loss of several PMs.” The program manager continued, “It’s stressful when you have so much to do and you feel like you can’t do everything to the level that you want to do it. So, you end up doing a little here, a little there, a little there, and I don’t think—I don’t feel like my programs get their full due at this point in time.”

G. Summary

In this chapter we presented the findings from the web-based survey given to TCAQ personnel. We then analyzed the results by comparing it to the “look for” and “cautions” of the GAO assessment framework to indicate practices that either assist or hinder good acquisitions outcomes. Finally, we provided recommendations based on the analysis. The next chapter will contain a summary of the entire research, conclusions, and areas for further research.



V. Summary, Research Questions and Goals, Conclusion, and Recommendations for Further Research

A. Introduction

This chapter provides a summary, the goals of the research questions and a conclusion to the research. This chapter also provides recommendations for further research related to improving acquisition within the USTRANSCOM.

B. Summary

This research began by examining the Defense Acquisition Environment. Within this environment, the Defense Acquisition System was identified as the DoD's implementation of a project management approach to defense acquisition. Organizational assessment tools and their benefits were then investigated. These tools measured the effectiveness of the project management approach through an analysis of an organization's policies and processes. The *GAO Framework for Assessing the Acquisition Function at Federal Agencies* was the final tool described and, ultimately, used for this research.

An overview of the United States Transportation Command and its major component organizations was then examined. Background information was discussed on the USTRANSCOM's acquisition authority as well as TCAQ's organizational structure and program management activities.

The set-up, methodology and demographics of the survey were then discussed. The survey statements were derived from the first two of the four total cornerstones of the *GAO Framework*. There were 19 survey responses out of 40 personnel that received the 57-question survey, resulting in a 47.5% response rate. The survey results were based on a majority percentage method. Highlighted findings of the survey were then reported. An analysis of the findings were then



presented and organized into three specific elements: Aligning Acquisition with Agency's Missions and Needs, Commitment from Leadership, and Effectively Managing the Acquisition Process. Each of the elements is associated with specific questions from the survey. Finally, this analysis formed the basis of the recommendations offered.

C. Research Questions and Goals

The two research questions for this project were:

- How does TCAQ align acquisition with the organization's mission and needs?
- How has TCAQ's recent reorganization affected program management processes?

According to the *GAO Framework*, the end goal of organizational alignment is to ensure that the acquisition function enables the agency to meet its overall missions and needs. The acquisition function needs proper management support and visibility within the organization to meet that goal (GAO, 2005b, p. 3). The research indicates that TCAQ has aligned acquisition to meet its overall mission and needs through effective communication, commitment from leadership, and the use of cross-functional teams.

The *GAO Framework's* Policies and Processes section provides the guidance to evaluate the second question concerning how TCAQ's recent reorganization affected program management processes. Policies and Processes embody the basic principles that govern the way an agency performs the acquisition function. To be effective, policies and processes must be accompanied by controls and incentives to ensure they are translated into practice (GAO, 2005b, p. 13). The research indicates that the recent organization of TCAQ has affected program management processes. Respondents recognized that change had occurred to the organization's mission and workforce. The increased workload from fighting two wars, combined with the



limitation of experienced program managers, is creating a stressful work environment, as indicated by the interviews with TCAQ personnel. All eleven interviewees commented on the increased operational tempo and lack of experienced personnel as affecting their ability to properly perform their duties.

The two primary goals of this research were as follows:

- To provide TCAQ with an assessment of its organizational structure, and
- To review and analyze TCAQ's program management processes.

The first goal of this research was achieved by providing TCAQ with an assessment of its organizational structure based on the *GAO Framework for Assessing the Acquisition Function at Federal Agencies*. Cornerstone 1 provided critical success factors in the areas of organizational leadership and alignment. These appearances or lack of these critical success factors may indicate the strengths and weaknesses of TCAQ's organizational structure.

The second goal of this research was achieved by reviewing and analyzing TCAQ's program management processes using Cornerstone 2 of the *GAO Framework for Assessing the Acquisition Function at Federal Agencies*. Cornerstone 2 provided critical success factors in the areas of policies and processes. Policies such as the use of cross-functional teams and processes such as the use of project plans were positive indicators in this area.

D. Conclusions

The following conclusions were reached from this research and are based on TCAQ personnel's perceptions that were gained from the survey and interviews.



1. TCAQ Leadership is Perceived to Communicate Effectively with and Have a Positive Attitude Toward Its Workforce

As outlined in Chapter IV, results from the surveys and semi-structured interviews indicate strong perceptions in this area.

2. The Roles and Responsibilities of Stakeholders in the Acquisition Process are Not Well Defined; However, TCAQ Leadership is Perceived to Hold Stakeholders Accountable for Their Actions

Results indicated that stakeholders (i.e., TCAQ acquisition personnel, end-users, service/IT contractors, etc.) do not have well-defined roles and responsibilities within the TCAQ acquisition process. While the results were inconclusive on leadership empowering stakeholders, the majority of respondents agreed that TCAQ leadership holds stakeholders accountable for their actions. These results highlight a potential area of concern when stakeholders are held accountable for their actions, yet their roles and responsibilities are not well defined.

3. The Following Changes to the Mission and Work Force Following the TCAQ Reorganization were Observed

- Mission: Fighting two wars (Iraq and Afghanistan) as well as assuming acquisition authority for its own programs.
- Workforce: TCAQ restructured its organization to include PMs. Furthermore, the loss of several of these PMs to retirement, as well as lateral job movements. Finally, the addition of support contractors with program management experience.

4. TCAQ Utilizes Cross-functional Teams and These Teams Use Project Plans

TCAQ's utilizes cross-functional teams for all of its programs. These teams are comprised of the following disciplines: program management, engineering, budgeting, logistics management and contracting. Functionally aligned groups, matrix alignments, and cross-functional, self-managing work teams all represent



organizational structures recommended by different management philosophies (DoD, 2003, p. 112).

According to the *GAO Framework*, project plans should be used to manage and control project implementation. Project plans are also known as program plans in DoD acquisitions (DoD, 2003, p. 29). These plans should include performance measurement baselines for schedule, cost, and major milestones. By using project plans, TCAQ's program teams are positioned to monitor the effectiveness of acquisition strategy implementation.

5. There Are Insufficient Metrics Related to Acquisition Efficiency and Risks; the Results of Metrics May be Insufficiently Briefed to Leadership

The *GAO Framework* cautions against organizations that do not utilize metrics and mechanisms for addressing risks that arise in response to changing conditions. The key to the risk-monitoring process is to establish a cost, schedule and performance-management indicator system that the PM and other key personnel use to evaluate the status of the program. The indicator system should be designed to provide early warning of potential problems to allow management actions. Risk monitoring is not a problem-solving technique, but a proactive technique to obtain objective information on the progress to date in reducing risks to acceptable levels (DoD, 2003, p. 148). Survey results and interviews indicated that while TCAQ does have metrics, TCAQ personnel question their usefulness. Interviews with TCAQ personnel also revealed that TCAQ does utilize IPRs to evaluate its programs; however, the survey results highlight a potential area of concern relating to the effectiveness of these reviews.

The next section will provide several areas for further research that were revealed during the course of this project.



E. Recommendations for Further Research

Several recommendations for additional research emerged from the present study. As mentioned earlier, this research was limited in scope. It is recommended that TCAQ conduct a follow-on assessment utilizing the other two *GAO Framework* cornerstones, Human Capital and Knowledge and Information Management. This can be accomplished organically or by another student at the Naval Postgraduate School (NPS). Further research should investigate the professional maturity of TCAQ's program managers, focusing on individual competence and based on the PMBOK model. Finally, the USTRANSCOM could gain further insight into its acquisition communities by utilizing this same *GAO Framework* to analyze its component organizations.



APPENDIX A. Delegation Letter

A. Head-of-agency Delegation Letter

The United States Transportation Command (USTRANSCOM) acquisition workforce provides the resources to meet the USTRANSCOM mission by employing contract vehicles and program management to obtain the commercial transportation services required by the Department of Defense (DOD) and the information technology (IT) tools that enable the USTRANSCOM workforce and its customers.

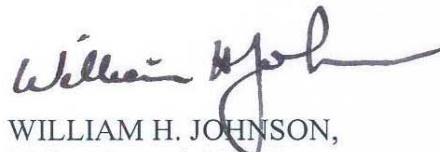
On 6 August 2004, Secretary of Defense, the Under Secretary of Defense (Acquisition, Technology, and Logistics), the Assistant Secretary of Defense (Networks and Information Integration) and the Director of Defense Procurement and Acquisition Policy approved establishment of a USTRANSCOM contracting activity and delegated to the Commander of USTRANSCOM the authority to act as “head of agency” or “agency head” for the purposes of the Federal Acquisition Regulation (FAR) and the Defense FAR Supplement. USTRANSCOM became the third unified command, in addition to Special Operations Command and Joint Forces Command, granted acquisition authority.

The Commander, USTRANSCOM, has delegated authority to act as the Senior Procurement Executive, to the Chief of Staff, who delegated the head of contracting activity (HCA) to the Director, Command Acquisition.

To support this new mission, the command grew its contracting staff from a team of five to 25 world-class acquisition professionals in 2005. The Base Realignment and Closure (BRAC) legislation of 2005 significantly impacted acquisition within the command. As a result, the Command Acquisition Directorate will grow to an end-strength of approximately 150 personnel by fiscal year 2010. As the organization grows in scope and complexity, a Senior Executive Service (SES) leader is critical to focusing the command contracting and management functions in support of transportation and distribution for the Department of Defense.

USTRANSCOM also recognized the need for program managers to lead the acquisition of service and information technology development. The command possesses two O-6 program manager billets to lead the command’s two flagship programs, and has added O-5 and GS-14 program managers to establish policy for program management and provide assistance to the command’s smaller IT projects.

I am proud of the work each of these individuals has accomplished in standing up a world class organization and accomplishing the day to day mission. I am confident that USTRANSCOM is prepared to accomplish our acquisition mission today and in the future.



WILLIAM H. JOHNSON,
Major General, U.S. Army
Senior Procurement Executive



APPENDIX B. Survey and Results

1. Informed Consent Form

Introduction: You are invited to participate in a study entitled Acquisition in USTRANSCOM: An Organizational Assessment.

Procedures: The purpose of this study is to assess the acquisition function within USTRANSCOM through a web-based survey (all personnel within TCAQ division) and some semi-structured interviews. The survey and interview questions all have been derived from Government Accountability Office Report GAO-05-218G (Framework for Assessing the Acquisition Function at Federal Agencies). The online survey will take ~20 minutes to complete.

Risks: The potential risks of participating in this study are: risk of breach of confidentiality for our semi-structured interview participants. However, all documents will be safeguarded to the highest reasonable extent to avoid individual names associated with responses being obtained by personnel other than the primary investigator, co-researcher and his advisors.

Benefits: The anticipated benefit from this study is an MBA professional report which will be delivered to USTRANSCOM. This report will document our research and offer recommendations on USTRANSCOM's acquisition function.

Compensation: No tangible compensation will be given.

Confidentiality & Privacy Act: Any information that is obtained during this study will be kept confidential to the full extent permitted by law. All efforts, within reason, will be made to keep your personal information in your research record confidential but total confidentiality cannot be guaranteed (interview participants). However, it is possible that the researcher may be required to divulge information obtained in the course of this research to the subject's chain of command or other legal body. The individual providing information will be held confidential by the researcher.

Voluntary Nature of the Study: Participation in this study is strictly voluntary, and if agreement to participation is given, it can be withdrawn at any time without prejudice.

Points of Contact: I understand that if I have any questions or comments regarding this project upon the completion of my participation, I should contact the Principal Investigator, Dr. Rene G. Rendon, 831-656-3464, rgrendon@nps.edu. Any other questions or concerns may be addressed to the Navy Postgraduate School. IRB Chair, LCDR Paul O'Connor, 831-656-3864, peoconno@nps.edu.

Statement of Consent: The purpose, procedures, and duration of participation in this research project have been fully explained. I understand how my identification will be safeguarded and have had all my questions answered. By clicking next I agree to participate in this study. I understand that by agreeing to participate in this research I do not waive any of my legal rights.



APPENDIX C. USTRANSCOM TCAQ Survey

1. Is your job at USTRANSCOM more closely associated with:		
Answer Options	Response Percent	Response Count
Program Management	58.3%	14
Contracting	33.3%	8
Finance	4.2%	1
Other Acquisition (please specify)	4.2%	1
<i>answered question</i>		24
<i>skipped question</i>		0

2. My organization has experienced significant changes in its mission since the reorganization of USTRANSCOM Acquisition.		
Answer Options	Response Percent	Response Count
Definitely Agree	36.8%	7
Agree	31.6%	6
Neither agree nor disagree	15.8%	3
Disagree	15.8%	3
Definitely Disagree	0.0%	0
<i>answered question</i>		19
<i>skipped question</i>		5

3. My organization has experienced significant changes in its budget since the reorganization of USTRANSCOM Acquisition.		
Answer Options	Response Percent	Response Count
Definitely Agree	5.3%	1
Agree	26.3%	5
Neither agree nor disagree	36.8%	7
Disagree	26.3%	5
Definitely Disagree	5.3%	1
<i>answered question</i>		19
<i>skipped question</i>		5

4. My organization has experienced significant changes in its workforce since the reorganization of USTRANSCOM Acquisition.		
Answer Options	Response Percent	Response Count
Definitely Agree	47.4%	9
Agree	31.6%	6
Neither agree nor disagree	5.3%	1
Disagree	15.8%	3
Definitely Disagree	0.0%	0
<i>answered question</i>		19
<i>skipped question</i>		5



5. My organization has experienced significant changes in its technology since the reorganization of USTRANSCOM Acquisition.

Answer Options	Response		
	Response	Response	
Definitely Agree	11.1%	2	
Agree	38.9%	7	
Neither agree nor disagree	22.2%	4	
Disagree	22.2%	4	
Definitely Disagree	5.6%	1	
		<i>answered question</i>	18
		<i>skipped question</i>	6

6. My organization has mechanisms to anticipate, identify, and react to risks presented by changes in conditions that can affect acquisition related goals.

Answer Options	Response		
	Response	Response	
Definitely Agree	5.6%	1	
Agree	33.3%	6	
Neither agree nor disagree	16.7%	3	
Disagree	38.9%	7	
Definitely Disagree	5.6%	1	
		<i>answered question</i>	18
		<i>skipped question</i>	6

7. My organization has metrics related to acquisition efficiency, effectiveness, and results that are included as part of overall performance plan and communicated regularly to senior leaders and management.

Answer Options	Response		
	Response	Response	
Definitely Agree	5.3%	1	
Agree	26.3%	5	
Neither agree nor disagree	26.3%	5	
Disagree	42.1%	8	
Definitely Disagree	0.0%	0	
		<i>answered question</i>	19
		<i>skipped question</i>	5

8. The roles and responsibilities of stakeholders in the acquisition process are well defined.

Answer Options	Response		
	Response	Response	
Definitely Agree	0.0%	0	
Agree	36.8%	7	
Neither agree nor disagree	15.8%	3	
Disagree	42.1%	8	
Definitely Disagree	5.3%	1	
		<i>answered question</i>	19
		<i>skipped question</i>	5



9. Leadership empowers stakeholders to coordinate, integrate, and ensure consistency among acquisition actions.		
Answer Options	Response	
	Response	Response
Definitely Agree	5.3%	1
Agree	26.3%	5
Neither agree nor disagree	42.1%	8
Disagree	15.8%	3
Definitely Disagree	10.5%	2
		answered question 19
		skipped question 5

10. Stakeholders are held accountable for their actions.		
Answer Options	Response	
	Response	Response
Definitely Agree	5.3%	1
Agree	31.6%	6
Neither agree nor disagree	36.8%	7
Disagree	26.3%	5
Definitely Disagree	0.0%	0
		answered question 19
		skipped question 5

11. Senior leadership communicates strategic, integrated, and organization-wide vision for the acquisition function.		
Answer Options	Response	
	Response	Response
Definitely Agree	5.3%	1
Agree	42.1%	8
Neither agree nor disagree	31.6%	6
Disagree	21.1%	4
Definitely Disagree	0.0%	0
		answered question 19
		skipped question 5

12. I feel that senior leadership effectively communicates the organization's missions, values, and guiding principles for the acquisition function, to agency personnel.		
Answer Options	Response	
	Response	Response
Definitely Agree	5.3%	1
Agree	36.8%	7
Neither agree nor disagree	36.8%	7
Disagree	21.1%	4
Definitely Disagree	0.0%	0
		answered question 19
		skipped question 5



13. I feel leadership and management has a positive and supportive attitude toward the organization's workforce.		
Answer Options	Response	
	Response	Response
Definitely Agree	26.3%	5
Agree	36.8%	7
Neither agree nor disagree	26.3%	5
Disagree	5.3%	1
Definitely Disagree	5.3%	1
		answered question 19
		skipped question 5

14. Managers at all levels are held accountable for their contributions to the acquisition process		
Answer Options	Response	
	Response	Response
Definitely Agree	5.3%	1
Agree	63.2%	12
Neither agree nor disagree	5.3%	1
Disagree	21.1%	4
Definitely Disagree	5.3%	1
		answered question 19
		skipped question 5

15. I have been asked for my view on the effectiveness of this communication.		
Answer Options	Response	
	Response	Response
Definitely Agree	0.0%	0
Agree	26.3%	5
Neither agree nor disagree	31.6%	6
Disagree	36.8%	7
Definitely Disagree	5.3%	1
		answered question 19
		skipped question 5

16. Stakeholders have been asked for their views on the effectiveness of the existing acquisition process and areas needing improvement.		
Answer Options	Response	
	Response	Response
Definitely Agree	0.0%	0
Agree	31.6%	6
Neither agree nor disagree	26.3%	5
Disagree	36.8%	7
Definitely Disagree	5.3%	1
		answered question 19
		skipped question 5



17. My organization uses cross-functional teams in performing acquisitions activities.		
Answer Options	Response Response	
Definitely Agree	36.8%	7
Agree	57.9%	11
Neither agree nor disagree	5.3%	1
Disagree	0.0%	0
Definitely Disagree	0.0%	0
		answered question 19
		skipped question 5

18. I feel empowered to make decisions that affect the project's outcome.		
Answer Options	Response Percent	Response Count
Definitely Agree	21.1%	4
Agree	36.8%	7
Neither agree nor disagree	10.5%	2
Disagree	26.3%	5
Definitely Disagree	5.3%	1
		answered question 19
		skipped question 5

19. I use a project plan to manage and control implementation of projects.		
Answer Options	Response Response	
Definitely Agree	21.1%	4
Agree	36.8%	7
Neither agree nor disagree	36.8%	7
Disagree	5.3%	1
Definitely Disagree	0.0%	0
		answered question 19
		skipped question 5

20. My project's plan uses performance measurement baselines for schedule and cost.		
Answer Options	Response Response	
Definitely Agree	5.3%	1
Agree	47.4%	9
Neither agree nor disagree	26.3%	5
Disagree	15.8%	3
Definitely Disagree	5.3%	1
		answered question 19
		skipped question 5



21. My project's plan uses performance measurement baselines for major milestones and target dates.		
Answer Options	Response	
	Response	Response
Definitely Agree	5.3%	1
Agree	57.9%	11
Neither agree nor disagree	21.1%	4
Disagree	10.5%	2
Definitely Disagree	5.3%	1
		answered question 19
		skipped question 5

22. My project's plan uses performance measurement baselines for risk associated with the project.		
Answer Options	Response	
	Response	Response
Definitely Agree	5.3%	1
Agree	47.4%	9
Neither agree nor disagree	21.1%	4
Disagree	21.1%	4
Definitely Disagree	5.3%	1
		answered question 19
		skipped question 5

23. I involve individuals outside the project team to regularly review the status of cost, schedule or performance goals.			
Answer Options	Response	Response	
		Percent	Count
Definitely Agree	10.5%		2
Agree	36.8%		7
Neither agree nor disagree	31.6%		6
Disagree	21.1%		4
Definitely Disagree	0.0%		0
			answered question 19
			skipped question 5

24. There are incentives in place to encourage my team to meet project goals.			
Answer Options	Response	Response	
		Response	Response
Definitely Agree	0.0%		0
Agree	26.3%		5
Neither agree nor disagree	36.8%		7
Disagree	21.1%		4
Definitely Disagree	15.8%		3
			answered question 19
			skipped question 5



25. Our teams are held accountable for meeting cost, schedule, and performance goals.		
Answer Options	Response	
	Response	Response
Definitely Agree	15.8%	3
Agree	47.4%	9
Neither agree nor disagree	36.8%	7
Disagree	0.0%	0
Definitely Disagree	0.0%	0
		<i>answered question</i> 19
		<i>skipped question</i> 5

26. There is open, honest and clear communication among all stakeholders (team members, program officials, contractors)		
Answer Options	Response	Response
	Percent	Count
Definitely Agree	10.5%	2
Agree	73.7%	14
Neither agree nor disagree	5.3%	1
Disagree	5.3%	1
Definitely Disagree	5.3%	1
		<i>answered question</i> 19
		<i>skipped question</i> 5

28. My organization has a process to identify key contractors and subcontractors.		
Answer Options	Response	
	Response	Response
Definitely Agree	10.5%	2
Agree	31.6%	6
Neither agree nor disagree	36.8%	7
Disagree	21.1%	4
Definitely Disagree	0.0%	0
		<i>answered question</i> 19
		<i>skipped question</i> 5

29. The strategic purchasing managers in our organization are actively involved in defining requirements with internal stakeholders.		
Answer Options	Response	
	Response	Response
Definitely Agree	5.3%	1
Agree	21.1%	4
Neither agree nor disagree	63.2%	12
Disagree	5.3%	1
Definitely Disagree	5.3%	1
		<i>answered question</i> 19
		<i>skipped question</i> 5



30. My organization uses a rigorous contractor selection process to create a strong supplier base.		
Answer Options	Response	
	Response	Response
Definitely Agree	21.1%	4
Agree	36.8%	7
Neither agree nor disagree	21.1%	4
Disagree	21.1%	4
Definitely Disagree	0.0%	0
		answered question 19
		skipped question 5

31. My organization uses strategic purchasing managers for key goods and services.		
Answer Options	Response	
	Response	Response
Definitely Agree	5.3%	1
Agree	36.8%	7
Neither agree nor disagree	52.6%	10
Disagree	5.3%	1
Definitely Disagree	0.0%	0
		answered question 19
		skipped question 5

32. The strategic purchasing managers in our organization are actively involved in negotiating with potential providers of goods and services		
Answer Options	Response	
	Response	Response
Definitely Agree	10.5%	2
Agree	26.3%	5
Neither agree nor disagree	57.9%	11
Disagree	5.3%	1
Definitely Disagree	0.0%	0
		answered question 19
		skipped question 5

33. The strategic purchasing managers in our organization are actively involved in assisting and resolving performance or other issues after the contract is awarded.		
Answer Options	Response	
	Response	Response
Definitely Agree	5.3%	1
Agree	31.6%	6
Neither agree nor disagree	57.9%	11
Disagree	5.3%	1
Definitely Disagree	0.0%	0
		answered question 19
		skipped question 5



34. My organization provides training to its acquisition workforce on how to manage supplier (contractor) relationships.		
Answer Options	Response	
	Response	Response
Definitely Agree	15.8%	3
Agree	47.4%	9
Neither agree nor disagree	21.1%	4
Disagree	15.8%	3
Definitely Disagree	0.0%	0
		answered question 19
		skipped question 5

35. My organization has established an effective communication and feedback system with its suppliers (contractors) to continually assess and improve its own and its supplier's performance.		
Answer Options	Response	
	Response	Response
Definitely Agree	0.0%	0
Agree	57.9%	11
Neither agree nor disagree	36.8%	7
Disagree	5.3%	1
Definitely Disagree	0.0%	0
		answered question 19
		skipped question 5

36. My organization fosters an environment in which its suppliers (contractors) invest their intellectual capital—their ideas—into the venture.		
Answer Options	Response	
	Response	Response
Definitely Agree	10.5%	2
Agree	47.4%	9
Neither agree nor disagree	36.8%	7
Disagree	5.3%	1
Definitely Disagree	0.0%	0
		answered question 19
		skipped question 5

38. My organization tracks the types of acquisition methods used for acquiring goods and services to assess workload and training requirements.		
Answer Options	Response	
	Response	Response
Definitely Agree	0.0%	0
Agree	47.4%	9
Neither agree nor disagree	26.3%	5
Disagree	21.1%	4
Definitely Disagree	5.3%	1
		answered question 19
		skipped question 5



39. My organization has processes and controls in place to ensure effective oversight of supplier (contractor) performance.		
Answer Options	Response	
	Response	
Definitely Agree	15.8%	3
Agree	73.7%	14
Neither agree nor disagree	0.0%	0
Disagree	5.3%	1
Definitely Disagree	5.3%	1
		answered question 19
		skipped question 5

40. My organization clearly defines the roles and responsibilities for those who perform contract management and oversight.		
Answer Options	Response	
	Response	
Definitely Agree	21.1%	4
Agree	68.4%	13
Neither agree nor disagree	0.0%	0
Disagree	5.3%	1
Definitely Disagree	5.3%	1
		answered question 19
		skipped question 5

41. My organization has taken required actions to ensure that it has adequate staff with the right skills, knowledge, and training to implement policies and processes and to oversee suppliers (contractors).		
Answer Options	Response	
	Response	
Definitely Agree	5.6%	1
Agree	61.1%	11
Neither agree nor disagree	11.1%	2
Disagree	16.7%	3
Definitely Disagree	5.6%	1
		answered question 18
		skipped question 6

42. My organization uses agency personnel or external parties with appropriate knowledge, skills, and responsibilities to monitor internal control over the acquisition process on a continuous basis.		
Answer Options	Response	
	Response	
Definitely Agree	5.3%	1
Agree	47.4%	9
Neither agree nor disagree	31.6%	6
Disagree	10.5%	2
Definitely Disagree	5.3%	1
		answered question 19
		skipped question 5



43. My organization effectively uses and requires its contractors to use earned value management as an investment planning and control tool.		
Answer Options	Response	
	Response	Response
Definitely Agree	5.3%	1
Agree	15.8%	3
Neither agree nor disagree	52.6%	10
Disagree	21.1%	4
Definitely Disagree	5.3%	1
		answered question 19
		skipped question 5

44. My organization monitors the effectiveness of acquisition policies and processes.		
Answer Options	Response	
	Response	Response
Definitely Agree	10.5%	2
Agree	47.4%	9
Neither agree nor disagree	21.1%	4
Disagree	15.8%	3
Definitely Disagree	5.3%	1
		answered question 19
		skipped question 5

45. My organization completes a cost benefit analysis when considering alternative policies and processes.		
Answer Options	Response	
	Response	Response
Definitely Agree	10.5%	2
Agree	63.2%	12
Neither agree nor disagree	5.3%	1
Disagree	21.1%	4
Definitely Disagree	0.0%	0
		answered question 19
		skipped question 5

46. In my organization, a significant percentage (>50%) of contracts fail to meet cost.		
Answer Options	Response	
	Response	Response
Definitely Agree	0.0%	0
Agree	10.5%	2
Neither agree nor disagree	42.1%	8
Disagree	31.6%	6
Definitely Disagree	15.8%	3
		answered question 19
		skipped question 5



47. In my organization, a significant percentage (>50%) of contracts fail to meet schedule.		
Answer Options	Response Response	
Definitely Agree	0.0%	0
Agree	10.5%	2
Neither agree nor disagree	36.8%	7
Disagree	36.8%	7
Definitely Disagree	15.8%	3
		answered question 19
		skipped question 5

48. In my organization, a significant percentage (>50%) of contracts fail to meet performance.		
Answer Options	Response Response	
Definitely Agree	5.3%	1
Agree	0.0%	0
Neither agree nor disagree	31.6%	6
Disagree	42.1%	8
Definitely Disagree	21.1%	4
		answered question 19
		skipped question 5

49. In my organization, a significant percentage (>50%) of contracts fail to meet quality requirements.		
Answer Options	Response Response	
Definitely Agree	0.0%	0
Agree	10.5%	2
Neither agree nor disagree	15.8%	3
Disagree	52.6%	10
Definitely Disagree	21.1%	4
		answered question 19
		skipped question 5

51. Our acquisition force has access to and uses timely contractual financial information to monitor and oversee individual acquisitions.		
Answer Options	Response Response	
Definitely Agree	0.0%	0
Agree	52.6%	10
Neither agree nor disagree	36.8%	7
Disagree	10.5%	2
Definitely Disagree	0.0%	0
		answered question 19
		skipped question 5



52. My organization's financial management system integrates with the contract management system.		
Answer Options	Response	
	Response	
Definitely Agree	0.0%	0
Agree	15.8%	3
Neither agree nor disagree	31.6%	6
Disagree	42.1%	8
Definitely Disagree	10.5%	2
		answered question 19
		skipped question 5

53. Our financial management system reports frequently enough to provide reasonable assurance of accountability in acquisitions.		
Answer Options	Response	
	Response	
Definitely Agree	0.0%	0
Agree	36.8%	7
Neither agree nor disagree	31.6%	6
Disagree	26.3%	5
Definitely Disagree	5.3%	1
		answered question 19
		skipped question 5

54. Financial data resulting from new contracts, task orders and contract modifications is clear and recorded properly.		
Answer Options	Response	
	Response	
Definitely Agree	0.0%	0
Agree	42.1%	8
Neither agree nor disagree	47.4%	9
Disagree	10.5%	2
Definitely Disagree	0.0%	0
		answered question 19
		skipped question 5

55. My organization measures how often erroneous or improper payments are made.		
Answer Options	Response	
	Response	
Definitely Agree	0.0%	0
Agree	31.6%	6
Neither agree nor disagree	52.6%	10
Disagree	15.8%	3
Definitely Disagree	0.0%	0
		answered question 19
		skipped question 5



56. My organization takes appropriate corrective action when the contractor is not meeting expectations for cost, schedule or performance.		
Answer Options	Response	
	Response	Count
Definitely Agree	0.0%	0
Agree	57.9%	11
Neither agree nor disagree	31.6%	6
Disagree	10.5%	2
Definitely Disagree	0.0%	0
<i>answered question</i>		19
<i>skipped question</i>		5

APPENDIX D. GAO Assessment Framework Indicators for “Effectively Managing the Acquisition Process”

1. Critical Success Factor—“Organizing the Acquisition Function to Operate Strategically”

KEY QUESTIONS

- Has the agency assessed the current structure of the acquisition function and related controls? If so, what were the results of the study?
- Has the agency experienced significant changes in its missions, budget, workforce, technology, or other internal or external factors? What changes, if any, did the agency make in response to such factors?
- Does the agency have mechanisms to anticipate, identify, and react to risks presented by changes in conditions that can affect agency-wide or acquisition related goals?
- Does the agency have metrics related to acquisition efficiency, effectiveness, and results that are included as part of overall performance plan and communicated regularly to senior leaders and management? Are these metrics linked to agency missions and goals?
- Does the agency use its strategic and annual performance plan to document the contribution that agency officials expect the acquisition function will make to the agency’s missions, strategic goals, and annual goals?



LOOK FOR

- The acquisition function's mission is well-defined, and its vision for the future, core values, goals, and strategies are consistent with and support the agency's overall missions.
- The current structure of the acquisition function has been assessed in response to changes, such as in the missions, operating environment, budget, workforce, or technology.
- Outcome-oriented performance measures are used to assess the success of the acquisition function. These measures should be designed to gauge the contribution that the acquisition function makes to support the agency's missions and goals.

CAUTIONS

- The agency lacks a clear definition of the acquisition function's mission, vision, core values, goals, or strategies.
- The agency has not assessed the role of the acquisition function in response to significant changes.
- The agency lacks a mechanism for addressing risks that arise in response to changing conditions.
- Performance measures are not used to evaluate the usefulness of the acquisition function to support the agency's missions.

2. **Critical Success Factor—“Clearly Defining and Integrating Roles and Responsibilities”**

KEY QUESTIONS

- What are the roles and responsibilities of stakeholders in the agency's acquisition process?
- Does the agency empower stakeholders to coordinate, integrate, and ensure consistency among acquisition actions?
- How are stakeholders held accountable for their actions?



LOOK FOR

- Each stakeholder in the acquisition process has clearly defined roles and responsibilities.
- There is a shared understanding of each participant's role in acquisition activities.
- Key stakeholders are empowered to coordinate, integrate, and implement decisions about acquisitions.
- Acquisition managers support the agency's strategic-planning and decision making needs at field and headquarters levels.

CAUTIONS

- The acquisition function's role is unclear. Acquisition and other agency offices do not clearly communicate and cooperate.
- There is little integration of acquisition planning among the different agency entities with a role in acquisitions.
- Conflicts among stakeholders are left unresolved, thereby resulting in inefficient operations.
- The agency's acquisition office is frequently bypassed.

3. **Critical Success Factor—“Clear, Strong, and Ethical Executive Leadership”**

KEY QUESTIONS

- Does the agency have a chief acquisition officer? Is the officer's primary responsibility managing acquisitions?
- Has senior leadership articulated a strategic, integrated, and agencywide vision for the acquisition function?
- Is senior leadership actively involved in pursuing changes, if appropriate, to how the agency acquires goods and services?
- Are managers at all levels held accountable for their contributions to the acquisition process?



- Does agency leadership promote integration and coordination among the agency's budgetary processes and human capital, acquisition, and financial management functions?
- Does agency leadership and management have a positive and supportive attitude toward internal control?
- Has agency management recently reviewed its key acquisition-related internal controls? If so, what were the results? Are all aspects of the acquisition program covered in the internal control review?

LOOK FOR

- The agency has a chief acquisition officer dedicated to managing acquisitions in the agency.
- Senior leadership provides direction and vision, facilitates the development of common processes and approaches, and is involved in identifying and assessing risks associated with meeting acquisition objectives.
- Senior leadership promotes a strategic, integrated, and agencywide approach to acquisition, as appropriate.
- Improvement initiatives involve stakeholders from across the agency.
- Senior leadership and management set a positive and supportive attitude toward internal control.
- Senior leadership and management support monitoring to assess the quality of internal control performance and to ensure that issues are promptly resolved.
- Senior leadership and management have assessed risks the agency faces from external and internal sources in relation to acquisition objectives.
- Actions taken to address risks are effectively implemented.



CAUTIONS

- There is no chief acquisition officer, or the officer has other significant responsibilities and may not have management of acquisition as his or her primary responsibility.
- Senior leadership has not defined a common direction or vision for the acquisition function.
- Senior leadership does not continually support efforts to develop common processes and approaches.
- Senior leadership does not adequately set and maintain the agency's ethical tone, provides little guidance for proper behavior, and fails to remove temptations for unethical behavior or provide discipline when appropriate.
- Senior leadership has not comprehensively identified risks and considered all significant interactions between the agency and other parties.
- Agency management does not have adequate resources and support to implement common process and approaches.
- Agency personnel do not understand the importance of developing and implementing good internal controls.

4. **Critical Success Factor—“Effective Communication and Continuous Improvement”**

KEY QUESTIONS

- How does agency leadership communicate the agency's missions, values, and guiding principles, as well as its vision and expectations for the acquisition function, to agency personnel?
- Have agency personnel been asked for their views on the effectiveness of this communication?
- Does agency leadership facilitate and support clear lines of communication among all parties?



- Have stakeholders been asked for their views on the effectiveness of the existing acquisition process and areas needing improvement?
- What metrics does the agency use to demonstrate the impact and value of the acquisition function in supporting the agency's missions?
- What process does the agency use to develop these metrics?
- Are control activities an integral part of the agency's planning, implementation, review, and accountability activities to ensure results and stewardship of government resources?
- Does the agency or an independent organization continuously monitor control activities for their effectiveness at ensuring acquisition objectives are met?

LOOK FOR

- Agency leadership listens to its program units and other affected parties' needs and concerns and remains open to revising acquisition processes as appropriate.
- Revisions to processes reflect appropriate incorporation of affected parties' needs and concerns.
- Metrics used by agency leadership are targeted at demonstrating the impact and value of the acquisition function and provide useful feedback to identify areas for improvement.

CAUTIONS

- There is inadequate communication from agency leadership regarding the effectiveness of the acquisition function and how it supports agency missions.
- There is no mechanism in place for stakeholders to provide suggestions for improvement to the acquisition process.
- Little change is made to acquisition processes based on the needs and concerns expressed by affected parties.



- Internal control monitoring does not occur in the course of normal operations, is not performed continually, and is not ingrained in the agency's operations.
- The agency has inadequate policies, procedures, techniques, and mechanisms in place to ensure effective implementation of management directives.
- The agency has not implemented a program to continuously measure and assess the acquisition function's performance in supporting the agency's missions or achieving acquisition goals.
- Performance measures are in place but are not consistently utilized or communicated.

5. Critical Success Factor—"Empowering Cross-Functional Teams"

KEY QUESTIONS

- To what extent does the agency use cross-functional teams in performing acquisition activities? Are staff from field offices involved at any level? How?
- Do team members feel empowered to make decisions, and are they invested in the project's outcome?
- Do the teams use a project plan to manage and control project implementation?
- Does the project plan include performance measurement baselines for schedule and cost, major milestones, and target dates and risks associated with the project?
- Do individuals outside the project team regularly review the status of cost, schedule, and performance goals?
- Are incentives in place to encourage teams to meet project goals?
- How are teams held accountable for meeting cost, schedule, and performance goals?
- Is there good communication among all stakeholders?



LOOK FOR

- The agency uses cross-functional teams to plan for and manage projects.
- These teams develop a project plan to implement projects effectively.
- The agency systematically monitors project performance and establishes controls and incentives for accountability.
- Open, honest, and clear communication is encouraged among all parties, including team members, program officials, and contractors.

CAUTIONS

- The agency makes limited use of cross-functional teams.
- Project team members do not feel empowered to make decisions or invested in the project outcome.
- Teams fail to use key elements of good project management techniques, including monitoring project performance and establishing controls and incentives to meet project goals.

6. Critical Success Factor—“Managing and Engaging Suppliers”

KEY QUESTIONS

- Does the agency have a process to identify key suppliers?
- Does the agency use a rigorous supplier selection process to create a strong supplier base?
- Has the agency established commodity managers for key goods and services?
- What is the role of the commodity manager?
- Has the agency embraced effective supplier relationships as a core business strategy?
- Does the agency train its acquisition workforce on how to manage supplier relationships?



- Has the agency established an effective communication and feedback system with its suppliers to continually assess and improve its own and its suppliers' performance?
- Does the agency foster an environment in which suppliers invest their intellectual capital—their ideas—into the venture?

LOOK FOR

- The agency uses stringent supplier selection criteria while maintaining an appropriate level of competition among suppliers.
- The agency has established commodity managers for key goods and services.
- Commodity managers are actively involved in defining requirements with internal clients, negotiating with potential providers of goods and services, and assisting in resolving performance or other issues after the contract is awarded.
- The agency has established an effective communication and feedback system with its suppliers, such as designating an authoritative person as a single interface with key suppliers; using integrated teams to facilitate sharing of information; establishing an objective basis for providing feedback by setting performance measures and expectations in terms of quality, responsiveness, timeliness, and cost; providing periodic “report cards” and meeting formally with key suppliers to discuss issues; and using surveys, supplier meetings, and formal agency-supplier councils or supplier advisory councils to assess existing customer-supplier working arrangements, identify problem areas, and report back to suppliers.

CAUTIONS

- Knowledge of its key suppliers is not shared across the agency.
- The agency does not take full advantage of the suppliers' intellectual capital, such as design or product ideas.



- The agency makes limited or no use of commodity managers to manage the acquisition of key goods and services.
- Commodity managers lack expertise, knowledge, or adequate training in the goods and services being procured.
- The agency is dependent on one or two suppliers for key goods or services.
- The agency continues to select the same suppliers without periodically assessing whether the goods and services offered are competitive in terms of price, quality, and performance.
- The acquisition workforce lacks the skills, knowledge, and expertise to manage supplier relationships effectively.

7. Critical Success Factor—“Monitoring and Providing Oversight to Achieve Desired Outcomes”

KEY QUESTIONS

- Does the agency track the types of acquisition methods used for acquiring goods and services to assess workload and training requirements?
- What tools, processes, and controls does the agency use to ensure effective oversight of contractor performance?
- What tools, processes, and controls does the agency use to ensure effective oversight of employees making purchases?
- What incentives does the acquisition workforce have to effectively monitor contractor performance?
- Does the agency clearly define the roles and responsibilities for those who perform contract management and oversight?
- What actions has the agency taken to ensure that it has adequate staff with the right skills, knowledge, and training to implement policies and processes and to oversee contractors?
- Do agency personnel or external parties with appropriate knowledge, skills, and responsibilities monitor internal control over the acquisition process on a continuous basis?
- Does the agency effectively use and require its contractors to use earned value management as an investment planning and control tool?



LOOK FOR

- The agency has undertaken a workforce-planning effort to ensure that individuals who award, manage, and monitor contracts have clearly defined roles and responsibilities and have the appropriate workload, skills, and training to perform their jobs effectively.
- The agency employs contract monitoring plans or risk-based strategies, and tracks contractor performance.
- The agency regularly reviews contract oversight processes, identifies areas needing improvement, and establishes and implements corrective action plans.
- The agency monitors the effectiveness of policies and processes, completes a cost benefit analysis when considering alternative policies and processes, and follows up on findings identified in monitoring efforts.
- The agency's suppliers have established earned value management systems, and the agency verifies that it and its suppliers effectively implement earned value management processes and procedures on all applicable programs.

CAUTIONS

- Personnel responsible for contract management have skills and knowledge gaps that inhibit their ability to properly oversee the types of contracts used by the agency.
- The agency does not monitor whether its contracts meet cost, schedule, performance, and quality requirements.
- A significant percentage of contracts fail to meet cost, schedule, performance, and quality requirements.
- The agency does not assign clear roles and responsibilities for overseeing contracts.
- There are material weaknesses and/or reportable conditions related to acquisitions in the agency's performance and accountability report.
- Earned value data are unavailable or unreliable, and earned value management principles are not properly implemented.



8. Critical Success Factor—“Enabling Financial Accountability”

KEY QUESTIONS

- Does the acquisition workforce have access to and use timely contractual financial information to monitor and oversee individual acquisitions?
- Is the agency’s financial management system integrated with its contract management system?
- Does the financial management system report frequently enough to provide reasonable assurance of accountability in acquisitions?
- Are financial data resulting from new contracts, task orders, and contract modifications clear and recorded properly?
- Does the agency measure how often erroneous or improper payments are made? Is a risk assessment process in place to address improper payments?

LOOK FOR

- The acquisition workforce has ready access to information on obligated and expended funds, with sufficient information to assure proper oversight and accounting at the contract level.
- Entries are made to the financial management system that updates the contract management and property accountability systems.
- The agency reports frequently enough—monthly or quarterly—to ensure accountability in the acquisition function.
- Adjustments to contract accounting records are clearly reported and accurate; such adjustments represent a low percentage of financial transactions.
- Erroneous and improper payments and cost overruns are tracked and are not a significant problem.
- The agency takes appropriate corrective action when the contractor is not meeting expectations for cost, schedule, or performance.



CAUTIONS

- Acquisition and financial management staff lacks access to critical information, including fiscal year; appropriation/Treasury fund symbol; organization code; cost center; object classification; estimated amount; project code; program code; transaction date; action code; subject-to-funds availability indicator; asset identifier code; contractor code/name; trading partner; trading partner code; award date; and amounts increased and/or decreased.
- Acquisition and financial management staff independently update the same types of data into independent financial and contract management systems.
- Financial management systems fail to provide transaction details to support account balances or identify the method of acquisition, lack evidence that the contractor's final invoice has been submitted and paid, or fail to perform other transaction processing and routine accounting activities adequately.
- Inadequate transaction processing, particularly improper payments, occurs frequently.
- Financial management systems fail to include the taxpayer identification number for contractor identification and income reporting and debt collection purposes.



LIST OF REFERENCES

- Air Mobility Command. (2009, January 1). *Fact sheet*. Retrieved June 1, 2009, from <http://www.amc.af.mil>
- Anonymous. (2004). Transcom realigns to perform as distribution process owner. *Army Logistician*, 47.
- Baselining. (n.d.). *BusinessDictionary.com*. Retrieved September 1, 2009, from <http://www.businessdictionary.com/definition/baselining.html>
- Becton, J., & Schraeder, M. (2009). Strategic human resources management: Are we there yet? *The Journal for Quality and Participation*, 31(4), 11–18. Retrieved August 5, 2009, from ABI/INFORM Global database.
- Business Executives for National Security. (2009, July). *Getting to best: Reforming the defense acquisition enterprise*. Washington, DC: Author.
- Church, A.H., Siegal, W., Javitch, M., Waclawski, J., & Burke, W.W. (1996). Managing organizational change: What you don't know might hurt you. *Career Development International*, 1(2), 25. Retrieved October 5, 2009, from ABI/INFORM Global database.
- DAU. (2008). *Introduction to defense acquisition management*. Fort Belvoir, VA: Defense Acquisition University Press.
- DAU. (2009, June 15). *Interim defense acquisition guidebook*. Retrieved August 5, 2009, from <https://acc.dau.mil/dag>
- DoD. (2003). *A guide to the program management body of knowledge*. Fort Belvoir, VA: Defense Acquisition University Press.
- DoDD. (2007, November 20). *DoD directives*. Retrieved June 3, 2009, from <http://www.dtic.mil/whs/directives/corres/pdf/50001p.pdf>
- DoDI. (2008, December 8). *DoD directives*. Retrieved June 3, 2009, from <http://www.dtic.mil/whs/directives/corres/pdf/50002p.pdf>
- England, G. (2005, June 7). *Memorandum for secretaries of the military departments*. Washington, DC: Author.
- Frame, J.D. (1999). *Project management competence*. San Francisco, CA: Jossey-Bass.



GAO. (1992). *Desert Shield/Storm: US Transportation Command's support of operation* (GAO/NAIAD-92-54). Washington, DC: Author.

GAO. (1997). *Acquisition reform: Implementation of Title V of the Federal Acquisition Streamlining Act of 1994* (GAO/NAIAD 97-22BR). Washington, DC: Author.

GAO. (2005a). *Defense acquisitions: Assessment of select major weapons programs* (GAO-05-301). Washington, DC: Author.

GAO. (2005b). *Framework for assessing the acquisition function of federal agencies* (GAO-05-218G). Washington, DC: Author.

GAO. (2009a). *Defense acquisitions: assessment of selected weapon programs* (GAO-09-326SP). Washington, DC: Author.

GAO. (2009b). *Defense acquisitions: measuring the value of DOD's weapon programs requires starting with realistic baselines* (GAO-09-543T). Washington, DC: Author.

Garcia, A., Keyner, H., Robillard, T.J., & Van Mullekom, M. (1997, January 1). The Defense Acquisition Workforce Improvement Act: Five years later. *Acquisition Review Quarterly*, 4, 1-21.

General Services Administration, Department of Defense, National Aeronautics and Space Administration. (2009, January 1). *Federal Acquisition Regulation*. Retrieved June 7, 2009, from <http://www.acquisition.gov/FAR/current/html>

Gratton, L., & Erickson, T.J. (2007). 8 ways to build collaborative teams. *Harvard Business Review*, 85 (11), 100-109.

Hargrove, M. (2009). *OPM3—Second edition*. Project Management Institute. Retrieved August 8, 2009, from <http://www.pmi.org/BusinessSolutions/Pages/OPM3.aspx>

Kadish, R.L. (2005). *Defense acquisition performance assessment briefing*. Retrieved May 25, 2009, from <http://www.acq.osd.mil/dapaproject/documents/DAPA-Report-web.pdf>

Kerzner, H. (2001). *Strategic planning for project management using a project management maturity model*. New York: John Wiley & Sons.



- Levin, C. (2009). Levin, McCain Introduce Legislation to Reform Weapon systems Acquisition Process. Retrieved Aug, 16, 2009, from <http://levin.senate.gov/newsroom/release.cfm?id=308529>
- Matthews, D.J. (1990). *General Duane H. Cassidy, United States Transportation Command's first Commander in Chief: An oral history*. Scott AFB, IL: USTRANSCOM Office of History.
- OMB. (1976, April 5). *Major systems acquisitions*. Washington, DC: Author.
- Packard, D. (1986, June 30). *A quest for excellence*. Washington, DC: Author.
- Reagan, R. (1987). *Establishment of the United States Transportation Command*. Memorandum for the Honorable Caspar W. Weinberger. Washington, DC: US Government Printing Office.
- Schwartz, M. (2009). *Defense acquisition: How DoD acquires weapon systems and recent efforts to reform the process*. Washington, DC: Congressional Research Service.
- Software Engineering Institute. (2007, November). *Software Engineering Institute's (SEI) Capability Maturity Model Integrated (CMMI) for Acquisition (CMMI-ACQ) (Ver. 1.2)*. Retrieved June 2, 2009, from <http://www.sei.cmu.edu/reports/07tr017.pdf>
- Under Secretary of Defense (AT&L). (2007, November 20). *The defense acquisition system (DoD Directive 5000.01)*. Washington, DC: Author.
- Under Secretary of Defense (AT&L). (2008, December 8). *Operation of the defense acquisition system (DoD Instruction 5000.02)*. Washington, DC: Author.
- US Air Force. (2009, January 1). *Fact sheet*. Retrieved June 2, 2009, from <http://www.af.mil>
- US Army. (2009, January 1). *Military surface deployment and distribution fact sheet*. Retrieved May 27, 2009, from <http://www.sddc.army.mil>
- US Code. (November 24, 2003). *Changes made to Defense Acquisition Workforce Improvement Act by the National Defense Authorization Act for FY2004*. Washington, DC: Author.
- USG. (2009). *National security decision directives, Reagan administration*. Retrieved June 2, 2009, from www.fas.org/irp/offdocs/nsdd/nsdd-219.htm



US Navy. (2009, January 1). *Fact sheet*. Retrieved May 25, 2009, from <http://www.navy.mil>

USTRANSCOM. (1998). *USTRANSCOM, Command in motion, 1998 USTRANSCOM annual command*. Scott AFB, IL: USTRANSCOM History Office.

USTRANSCOM. (2009a). *Fact sheet*. Retrieved June 17, 2009, from <http://www.ustranscom.mil>

USTRANSCOM. (2009b). *Program management mission brief*. Retrieved June 20, 2009, from TCAQ program office, Col. Mike Miller.

Warner, J. (2005, April 21). *Congressional hearing on defense acquisitions*. Retrieved May 7, 2009, <http://www.heritage.org/research/nationalsecurity/bg1885.cfm>.

Webb, W.J. (2000). Reorganizing the Joint Chiefs of Staff: The Goldwater–Nichols Act of 1986. *The Journal of Military History*, 64(4), 1221.



2003 - 2009 Sponsored Research Topics

Acquisition Management

- Acquiring Combat Capability via Public-Private Partnerships (PPPs)
- BCA: Contractor vs. Organic Growth
- Defense Industry Consolidation
- EU-US Defense Industrial Relationships
- Knowledge Value Added (KVA) + Real Options (RO) Applied to Shipyard Planning Processes
- Managing the Services Supply Chain
- MOSA Contracting Implications
- Portfolio Optimization via KVA + RO
- Private Military Sector
- Software Requirements for OA
- Spiral Development
- Strategy for Defense Acquisition Research
- The Software, Hardware Asset Reuse Enterprise (SHARE) repository

Contract Management

- Commodity Sourcing Strategies
- Contracting Government Procurement Functions
- Contractors in 21st-century Combat Zone
- Joint Contingency Contracting
- Model for Optimizing Contingency Contracting, Planning and Execution
- Navy Contract Writing Guide
- Past Performance in Source Selection
- Strategic Contingency Contracting
- Transforming DoD Contract Closeout
- USAF Energy Savings Performance Contracts
- USAF IT Commodity Council
- USMC Contingency Contracting



Financial Management

- Acquisitions via Leasing: MPS case
- Budget Scoring
- Budgeting for Capabilities-based Planning
- Capital Budgeting for the DoD
- Energy Saving Contracts/DoD Mobile Assets
- Financing DoD Budget via PPPs
- Lessons from Private Sector Capital Budgeting for DoD Acquisition Budgeting Reform
- PPPs and Government Financing
- ROI of Information Warfare Systems
- Special Termination Liability in MDAPs
- Strategic Sourcing
- Transaction Cost Economics (TCE) to Improve Cost Estimates

Human Resources

- Indefinite Reenlistment
- Individual Augmentation
- Learning Management Systems
- Moral Conduct Waivers and First-tem Attrition
- Retention
- The Navy's Selective Reenlistment Bonus (SRB) Management System
- Tuition Assistance

Logistics Management

- Analysis of LAV Depot Maintenance
- Army LOG MOD
- ASDS Product Support Analysis
- Cold-chain Logistics
- Contractors Supporting Military Operations
- Diffusion/Variability on Vendor Performance Evaluation
- Evolutionary Acquisition
- Lean Six Sigma to Reduce Costs and Improve Readiness



- Naval Aviation Maintenance and Process Improvement (2)
- Optimizing CIWS Lifecycle Support (LCS)
- Outsourcing the Pearl Harbor MK-48 Intermediate Maintenance Activity
- Pallet Management System
- PBL (4)
- Privatization-NOSL/NAWCI
- RFID (6)
- Risk Analysis for Performance-based Logistics
- R-TOC AEGIS Microwave Power Tubes
- Sense-and-Respond Logistics Network
- Strategic Sourcing

Program Management

- Building Collaborative Capacity
- Business Process Reengineering (BPR) for LCS Mission Module Acquisition
- Collaborative IT Tools Leveraging Competence
- Contractor vs. Organic Support
- Knowledge, Responsibilities and Decision Rights in MDAPs
- KVA Applied to AEGIS and SSDS
- Managing the Service Supply Chain
- Measuring Uncertainty in Earned Value
- Organizational Modeling and Simulation
- Public-Private Partnership
- Terminating Your Own Program
- Utilizing Collaborative and Three-dimensional Imaging Technology

A complete listing and electronic copies of published research are available on our website: www.acquisitionresearch.org



ACQUISITION RESEARCH PROGRAM
 GRADUATE SCHOOL OF BUSINESS & PUBLIC POLICY
 NAVAL POSTGRADUATE SCHOOL

THIS PAGE INTENTIONALLY LEFT BLANK



ACQUISITION RESEARCH PROGRAM
GRADUATE SCHOOL OF BUSINESS & PUBLIC POLICY
NAVAL POSTGRADUATE SCHOOL



ACQUISITION RESEARCH PROGRAM
GRADUATE SCHOOL OF BUSINESS & PUBLIC POLICY
NAVAL POSTGRADUATE SCHOOL
555 DYER ROAD, INGERSOLL HALL
MONTEREY, CALIFORNIA 93943

www.acquisitionresearch.org